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The Society was formed in 1946 to provide a forum for the exchange of information on seabirds, and land birds at sea, by members for whom birdwatching is a spare time recreation and hobby. It also aims to coordinate the efforts of individual members using standardised recording methods so that observations can be of value to the professional ornithologist. In addition to the promotion of observations afloat, the RNBWS organises fieldwork and expeditions, often in cooperation with the Army and RAF Ornithological Societies.

The Royal Naval Birdwatching Society is the only organisation in the world which collects, collates and publishes data on seabirds and landbirds at sea. Membership is open to all those, regardless of nationality, who share a common interest in birds at sea. Instructions for joining can be found on the Society website www.rnbws.org.uk or by application to the Secretary.

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Material for publication in *Sea Swallow* should be sent to the editor. Ideally submissions should be in MS Word or rtf format, but other formats are acceptable. Graphics should be jpeg or tiff. Accompanying photographs sent electronically should always be the original camera files, and not cropped in any way. Contributions are welcome at any time, but if for inclusion in the next edition should reach the editor by 30 July.

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Chairman's Foreword

by Rear Admiral Martin Alabaster

I can report to members that the Society is in good health. Our major task for the year ahead is sorting out the database, and Stephen Chapman has written an article about the various issues and challenges on page 94 In a nutshell, RNBWS, first in the field with its database of seabird and landbird observations, is now dwarfed by others and we need to consider how best to maintain and share our data for the common good without losing our identity. However, before we start talking to others we have to go through our data to correct any obvious errors, and I am pleased to report that this task is now almost complete, thanks to a heroic effort by Stephen. The next task will be to load onto the database a large backlog of seabird observations. This is more than a one-man task, so we hope to recruit a small team of volunteers - please let us know if you can help. Another related challenge is getting more observers at sea involved - people on cruise ships for instance.

As to this issue of *Sea Swallow*, something of an island theme has emerged. First there is an article on the remote Heard Island by Neil Cheshire, a first for *Sea Swallow* I think. Then there is a short piece with some fine illustrations on a visit to the Galapagos Islands by the Bartons. Reports from there are few in *Sea Swallow*, but the Royal Yacht Britannia, with our Patron HRH the Duke of Edinburgh on board visited the islands in February 1988 (see *Sea Swallow* 38) and Neil Cheshire reported on a visit to the islands in *Sea Swallow* 51.

Continuing the island theme are two articles on the splendid work on seabird conservation that the Army Ornithological Society (AOS) has been doing on Ascension Island for over a quarter of a century, one a historical piece and the other a report on the 2016 expedition. RNBWS members have often taken part in this work - indeed we provided three out of the five members of this year's outing - but the RNBWS Executive Committee feel we need our own project. In the past we have been involved in seabird conservation on Diego Garcia, but access there has become very difficult and expensive and we have therefore been looking for some time for seabird conservation opportunities nearer to home. As you will see on page 3 a recce team went out to Madeira to assist Dr Frank Zino in the monitoring and conservation of Zino's Petrel *Pterodroma madeira* in the mountain tops there. This was a total success and set the scene for what I hope will be an annual expedition from now on, with plenty to do both on and around Madeira and the nearby islands and also one hopes on the Selvagen Islands (like Madeira, part of Portugal) some hundred miles away. (See page 41 for Frank Zino's article on lizard predation of seabirds there, and see too Peter Carr's article on his September 2015 solo visit to Madeira, on page 65).

RNBWS was represented at the 2016 Seabird Group Conference, held in Edinburgh in September, and a short report on this can be found on page 86.

I said at the beginning that RNBWS is in good health, but it could do with more members, and that is a challenge for us all.

Martin Alabaster
Email: chairman@rnbws.org.uk

Plate 1. Half mile hike to netting site near the summit of Pico do Arieiro, Madeira, 1 July 2016. © *S Chapman*

RNBWS assist on Madeira with monitoring Zino's Petrel *Pterodroma madeira*

by Captain Stephen Chapman, MN

Our first encounter with the *freira* or Zino's Petrel *Pterodroma madeira* was around midnight at 1,765m in the mountains above Funchal. The long eerie hooting, mournful calls announced the presence of incoming flying birds. The male calls are higher pitched than the more guttural sounds of the females. The time of a new moon was selected for maximum darkness so that the petrels would not see the four-shelf sixty-foot net erected along a saddle between two higher crags.

Arriving on 30 June 2016, Stephen Chapman and David Dobson mounted a reconnaissance trip to Madeira to assess how best the Society could lend support to the monitoring of a small population of this critically endangered petrel that nests below the Pico do Arieiro. Like other small petrels this is a burrow nesting bird, digging in soft soil and vegetation on mountain ledges which are inaccessible except to those with ropes skilled in reaching such places. At this time the birds would be incubating a single egg. The petrels we were seeing would be those coming from the sea to relieve a sitting bird (both sexes incubate), and young prospecting birds returning to the area where they were reared. They are not thought to nest until five or six years of age and then not every year. To maintain the population, petrels are long lived. Our mission was simple: to assist in setting nets, monitoring and data recording, while Frank Zino released birds from the net and collected biometric data, lice and blood samples for DNA testing.

Plate 2. 60 ft net on guyed poles. © *S Chapman*

Two birds caught on the first night

With the net carefully set and secured we waited on a night completely dark with a back drop of stars. A light north easterly breeze disturbed the net. We waited. At 00.45 on 1 July a high pitched alarm call indicated that something was in the net. Success, not just one bird but two! One had already been ringed.

They were both young birds, and judging by the clean, sharp state of the nails and toes, and downy brood patch were assessed as non-breeders. At 02.00 we took the nets in and with the gear hiked back along a steeply stepped path to our vehicle and returned to Funchal to sleep. Two birds caught on our first night; it had been an excellent start.

Plate 3. Zino's Petrel with ring. © *S Chapman*

Fire, rats, goats and cats

According to the local warden, Gil Pereira, whom we met at the visitor centre, the island has suffered the effects of human impact over the years. As shown from fossil bones the birds once nested at much lower levels, closer to the sea. He thought that the widespread development had driven the birds to higher and remoter areas. Even here in mid-August 2010 a major fire destroyed trees, vegetation and peaty soil. It swept through burning all but one of 38 chicks, leaving exposed soil open to erosion by rains (*Sea Swallow* 62). Efforts to stabilise the ground since then have proved successful, and the vegetation appears to have recovered well. A rat eradication programme was initiated by the Freira Conservation Project (FCP) in 1986, under the guidance of Dr Alan Buckle, a world expert in rat control. Goats were removed in 2003/4 as was all livestock under a LIFE[1] programme. A remaining threat to nesting success comes from feral cats. Measures used to eliminate rodents didn't control felines, but in 1992 the FCP initiated a regimen of cat-traps after a cat managed to get onto one of the breeding ledges and kill 10 adult birds, which at the time was some 25% of the known population (Zino 1992, Zino *et al.* 2001). On one of our visits we spotted eyes shining in our torch light and on closer inspection found a striped cat but it was on a slope above a sheer drop and we could do nothing.

Plate 4 (top). Non-breeder showing under wing. © *Frank Zino*

Plate 5 (inset). Zino's Petrel. © *Frank Zino*

[1] EU's financial instrument supporting environmental, nature conservation and climate action projects. See: http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=1723

Table 1. Frequency of calls of Zino's Petrel and Manx Shearwater below Pico do Areeiro, June–July 2016.

	30 June 2016		1 July 2016		3 July 2016		5 July 2016	
	Calls	Comments	Calls	Comments	Calls	Comments	Calls	Comments
First call	22.40		22.40		22.47		22.50	
22.00–22.15								
22.15–22.30								
22.30–22.45					0		0	
22.45–23.00			125		86		6	All Curral
23.00–23.15			166	high above	181	Wind increasing	51	Curral & Cidrão
23.15–23.30			149	high & sides	251	1 Manx call	24	Cidrão
23.30–23.45	82		130	both sides	237	BIRD escaped!	68	Cidrão
23.45–00.00	153		65	10 Manx calls	184		BIRD	PM0336* 14 calls
00.00–00.15	180		98	Manx	181		8	
00.15–00.30	111		68	Manx				4
00.30–00.45	165							27
00.45–01.00	BIRD	PM0335*						28
	BIRD	I005459						
Average	138		114		187		27	
Wind		Fresh NE		Fresh NE	Gale & cloud		No wind	No wind
Moon		No Moon		No Moon	Cancelled		New Moon 4 July	No Moon

Monitoring petrel calls

Our work party returned the following night a little earlier to see the sun set and erect the net in the last of the daylight. Like the night before the first bird calls were heard at 22.40. Monitoring the rate of calls showed there was a lower frequency of calls than the previous night, plus calls from Manx Shearwater *Puffinus puffinus*, see Table 1, that nest at a much lower level on the cliff face, in even more inaccessible sites. An estimate of the breeding population of the Zino's Petrel may be possible by counting used burrows found on the cliff ledges and correlating with the number of calls. It may be a crude way of estimating the breeding population, but with limited opportunities to access the ledges, counting calls it is one metric relatively easy to collect.

The Manx Shearwaters have never been closely studied on Madeira. Dr David and Mary Bannerman visited in the years 1960 to 1964 in every month except July and August. Whilst they commented on species brought to the museum and the sound of night time calls over Funchal they made no estimate of the distribution or population size (Bannerman 1965). No mention is recorded of distribution or population in BWP (Cramp and Simmonds 1977) but the later Concise Edition states *Madeira over 500 pairs* (Snow and Perrins 1998).

There was a fresher north easterly breeze this night and we quit at 00.30 on 2 July without catching a single bird.

More attempts at catching petrels

Our third experience of ringing at the Pico came the next night. We departed from Funchal around 22.00 on a quiet balmy evening, and quickly made it to the summit passing through a band of cloud. At the top there was a stiff breeze such that it was pointless to set a net. The party returned to the coast for a glass of fine Malmsey Madeira and an early night's rest.

We were learning that netting Zino's Petrel is never straightforward. After an abortive night we returned on 3 July arriving well before dark to see the terrain, the sheer face where there are nests, and set the net in the fading light; we waited.

The first calls were heard at 22.47. The sky was cloudless. At 23.30 a passing bird bounced out of a taut net. It was the only contact that night and we packed up at 00.30, disappointed as conditions had appeared to be ideal.

Thus no two nights are the same with studying wildlife and at Arieiro in particular. The ascent from Funchal on 5 July saw us finding our way up in very wet moderate fog at 1,100m. It cleared at 1,280m to be another clear starlit night at the peak. We set the net as darkness fell and waited for the birds' calls. Nothing, until just before 23.00, later than other nights. There was less wind tonight and a lower number of calls, just an average 27 per 15 minute period compared to 114–187 on earlier nights. The call frequencies recorded during our visits were made by Dr Zino, using a hand held tally-counter, see Table 1. The team was starting to despair when just before midnight, thump a bird dropped in the net. We quickly retrieved it before it could climb free. Encouragingly it was a young unmarked bird, so was certainly from a population away from the monitored breeding site where all young have been ringed over the years. Biometric and DNA sample taken, it was set aside on a slope to depart in its own time. An hour later we hiked back to the top and returned to Funchal.

David left on the morning flight to London while Stephen returned to the peak on the evening of 6th July when the moon was starting to show well after sunset. On the coast it was a warm balmy evening. Reaching to Pico do Areeiro the weather was very different. At 1,800m a constant strong breeze was blowing from the north east such that even setting the net was pointless.

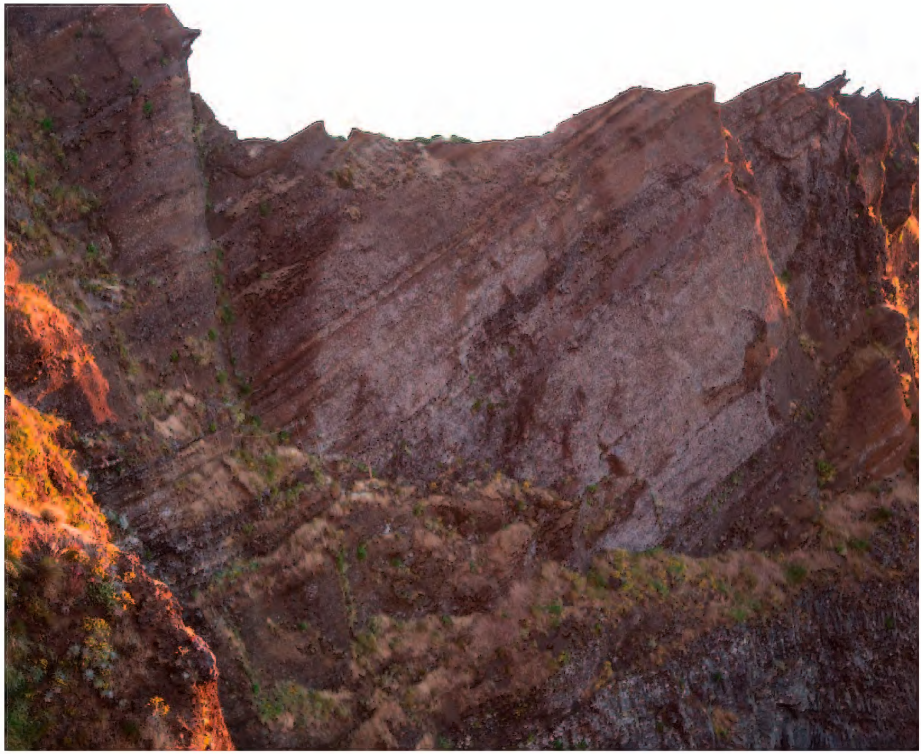

Plate 6. Nest site on a ledge at the foot of sheer cliff face. © *S Chapman*

Conclusion

We completed a full spectrum of nightly outcomes: catch a bird, a bounce-out; set nets but too windy and no birds caught; arrive don't set nets and return for an early night.

Our aim was a reconnaissance to see how we could best assist. With Dr Frank Zino as leader, a total team of three or four is needed for carrying gear, setting nets and ringing and recording. There is no room on the narrow path for more to work safely. We set a single net. There is scope to set a second net. We plan that this will be an ongoing project of support to assist with monitoring the population of Zino's Petrel.

Acknowledgements

We are grateful to Dr Frank Zino for his patience and explanations to all our questions, to Buffy for her fine cuisine and tea on the mountain and to Dr Manuel Biscoito, Curator of the Funchal Natural History Museum (MMF) and ichthyologist of Estação de Biologia Marinha do Funchal for allowing us to stay there.

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Editor's postscript

A month after the visit described above there was another fire in Madeira to rival that of 2010 (and like that earlier fire almost certainly started deliberately). The nesting area was mercifully not affected this time, but there was much damage elsewhere, as Frank Zino reported:

"The Parque Natural da Madeira (now Instituto das Florestas e Conservação da Natureza) workshop was totally destroyed by the fire and by the explosion of oxyacetylene cylinders inside, and they lost three new inflatables for the islands, together with their outboard engines. They also lost all the climbing equipment and rat poison etc. The inventory of the contents was also blown up so checking stock is very difficult.

This means that the cat traps are unattended and I have seen a cat on my last three visits at night; the rat poison is not being replaced and the nests are not being checked. On the plus side I did manage to persuade the Parque staff to help recover five dataloggers, each with some two years of data, but the MMF had to provide the transport as they had none. This is a horrendous situation and we are going back to where we were in 1986.

When you were here we talked about how you might help with things and I said manpower was the main thing missing. This you kindly provided and we got three birds. With this disaster what is urgently needed is cash so we can restock essentials - that is our most pressing need. I hope RNBWS can help".

Birds of Providence Atoll, Seychelles, and first population estimates of breeding Greater Crested Tern *Thalasseus bergii* and Black-naped Tern *Sterna sumatrana* at Bancs Providence

by Adrian Skerrett
(*Photographs by the author*)

Providence Atoll, which since 1976 has been part of the Seychelles, lies 710 km south-west of Mahé, the main island of Seychelles in terms of size and population. It is not a true atoll, but a bank 45 km in length oriented north - south varying from 1 km to 10 km wide and occupying an area of 345 sq km. The land area comprises Providence Island (157 ha) in the north and Bancs Providence or Cerf (71 ha) in the south, separated by 32 km of shallow water. Providence Island was inhabited by workers engaged in fishing and copra production, probably continuously from at least 1846 until late 2006. In 2016, Bancs Providence comprises four large and about six very small islands, but its size and shape appear to be dynamic. It has never been permanently inhabited, though temporary fishermen's huts have been recorded (Coppinger 1884). There are no alien mammals and the only land bird is the Madagascar Fody *Foudia madagascariensis*.

On 21 December 2006 Providence Atoll was hit by Cyclone Bondo, the worst cyclone to hit the Seychelles for half a century. Today, the atoll lies abandoned.

Cyclone Bondo had a severe impact on birds as well as humans. On my only previous visit to Providence in 1996, I noted a huge heronry at Providence with small numbers of Brown Noddy *Anous stolidus* and Fairy Tern *Gygis alba* nesting in the crests of coconut palms. The heronry was destroyed by the cyclone while near the settlement there were around 200 corpses of Brown Noddy and a number of dead Grey Heron *Ardea cinerea*. Loss of trees for the island as a whole was about 65% (D Dogley, pers. comm). A few Grey Heron were present feeding at the reef and less than ten Brown Noddy nearby; no Fairy Tern was seen. I was unable to visit Bancs Providence in 2006 but flying over the island it appeared most trees were down and the sea had washed over much of the land.

On 18 March 2016, I joined MY *Pangaea* for the fourth in a series of cruises to enable the local NGO Island Conservation Society to conduct research in the outer islands of Seychelles. The ship made a brief stop the following day at Boudeuse, 530 km from Port Victoria, and here I confirmed the presence of seven breeding pairs of Brown Booby *Sula leucogaster* (six on eggs, one with a downy chick), similar to the eight breeding pairs discovered during the first MY *Pangaea* cruise in November 2013 (Rocamora 2013). There were also about 1,000 pairs of nesting Masked Booby *S.*

dactylatra, many with eggs or chicks at various stages of development. In Seychelles, both these booby species breed only here and at Cosmoledo but have a much wider historical distribution (Feare 1978).

On 20 March 2016 we anchored off the west coast of Providence and the area was explored using small shallow draught skiffs in the case of Providence Atoll and a RIB in the case of St Pierre. I visited the northern half of Providence accompanied by Igor Tatarinov on 20 March, St Pierre accompanied by Richard Schumann the following day and the southern half of Providence accompanied by Dr Jeanne A. Mortimer on 22 March. The main ornithological observation of significance was the presence of a large high tide roost of waders at Point Gustave, the southern tip of Providence, including 220 Crab Plover *Dromas ardeola* and 150 Whimbrel *Numenius phaeopus.* Also noteworthy was the presence of about 800 Grey Heron in southern Providence; many breeding Grey Heron were observed on all coasts but especially at Point Gustave.

On 23 March 2016 I visited Bancs Providence, landing just after high tide near the northern tip at 8.30am. We proceeded southward crossing three channels between the four main islands and visiting other islands by walking over drying flats. We reached the southernmost island around 1pm and here we made the most remarkable ornithological discoveries of the cruise: undocumented and significantly large colonies of Greater Crested Tern *Thalasseus bergii* and Black-naped Tern *Sterna sumatrana.*

Plate 7. Greater Crested Tern crèche.

Plate 8. Greater Crested Tern.

Greater Crested Tern

Greater Crested Tern is resident on coasts and islands of the Red Sea and Persian Gulf to South Africa and Namibia, and across the Indian Ocean and central Pacific to the Society Islands with race *thalassinus* in the western Indian Ocean (del Hoyo *et al.* 1996). In Seychelles it is known to breed at seven islets of Aldabra (Diamond and Prŷs-Jones 1986), Etoile (Dawson 1965) and African Banks (Feare 1979). It was last documented at Etoile in 1965 (Dawson 1966) but probably still breeds, and nests were photographed by a visitor in 1998 (Islands Development Company archive, photographer unknown). Significant numbers of adults with a few begging juveniles observed at Boudeuse, Etoile and African Banks in November 2013 suggest that a minimum of 50 pairs continue to breed in the northern Amirantes (Rocamora 2013 and pers comm). It formerly bred and may still breed at Astove (adults seen with young, June 1969: Bayne *et al.* 1970). It may also breed at Cosmoledo, where it is commonly encountered. Non-breeding birds disperse widely and are fairly common throughout Seychelles all year round suggesting some breeding sites remain to be discovered.

Greater Crested Tern chicks leave nests about two days after hatching, one parent looking after each chick or chicks forming a crèche (Domm and Recher 1973, Domm 1977). Young are able to fly at 40 days (Milon 1950). A few of the young we observed still retained considerable down, but most were well feathered and probably within 2–3 weeks of being able to fly. Incubation lasts 25–30 days, fledging 38–40 days. Working backwards this suggests laying dates in January–February. Elsewhere in Seychelles, there are two known laying periods at Aldabra, December–January and June–August, while at African Banks eggs have been recorded in November (Vesey-Fitzgerald 1941) and July (Feare 1979).

The number of fledglings within the crèche was difficult to count manually and I found the best method was to photograph the entire crèche and count the individuals later. In this way, I counted 152 fledglings. Around 200 adults were also present at the colony site, with more observed at other locations throughout the day.

There is little information on breeding success in the region but elsewhere productivity is 0–0.6 per nest (del Hoyo *et al.* 1996). Birds observed at Bancs Providence were close to fledging, so the colony might be at least 250 pairs, making it the largest known colony in Seychelles at the present date. However, this is speculative and more information is needed to assess more accurately the numbers breeding at Providence. Meanwhile, a range of 200–300 pairs is estimated.

Previous first hand references to Greater Crested Tern at Providence Atoll are largely imprecise with regard to breeding. The earliest report is of two specimens collected by Abbott on 17 August 1892 with no mention of breeding (Ridgway 1895). Diamond and Prŷs-Jones (1986) summarise distribution of terns breeding in Seychelles, citing seven references for the Providence bank area. However, some of these refer only to terns of other species at Farquhar, not Providence. Where Greater Crested Tern is mentioned, Providence is not mentioned. Gadow and Gardiner (1907) state "it was never definitely found breeding" and Dawson (1966) names only Etoile as a breeding site. The only one of the list of sources to mention this species at Providence is Stoddart (1967) who states "Sea birds breeding on the bank include *Sterna bergii thalasseus*" but without reference to exact location or numbers.

The Seychelles population as a whole has been previously estimated at 260–700 pairs (Rocamora and Skerrett 2001). However, this includes an estimate of 100–500 pairs at Cosmoledo, potentially the largest Seychelles colony, where breeding is yet to be proven. The total Seychelles population of Greater Crested Tern is estimated as follows:

Table 1. Total Seychelles population of Greater Crested Tern 2016.

Location	Population	References
Aldabra	60–100 pairs	Diamond & Prŷs-Jones 1986; Rocamora & Skerrett 2001
Cosmoledo	Unknown, possibly 0–100 pairs	
Astove	Unknown, possibly 0–50 pairs	
Bancs Providence	200–300 pairs	This paper
Northern Amirantes (African Banks, Etoile and possibly Boudeuse)	*c.* 50–100 pairs	Dawson 1966; Feare 1979; 1998 photograph; Rocamora 2013 & pers. comm.
TOTAL	310–650 pairs (or 930–1,950 birds as per Wetlands International 2006)	

This is the first report of this breeding species at Providence Atoll since Stoddart (1967). It is the first estimate of numbers other than a figure of 10–100 in 1986 (Diamond and Prŷs-Jones 1986). It is the first indication of breeding season at this locality of the atoll (the southernmost island of Bancs Providence).

Black-naped Tern

Black-naped Tern is resident from Micronesia to the western Indian Ocean (del Hoyo *et al.* 1996). There may be two races with *mathewsi* restricted to the Malagasy region, Maldives and Chagos, but alternatively it may be monotypic (Safford and Hawkins 2013). Seychelles lies at the western extremity of the species' range and holds all or almost all of the African regional population. Black-naped Tern is known to breed on Aldabra, Cosmoledo, Farquhar, St Joseph Atoll, St Francois and African Banks with breeding at Farquhar only discovered in 2006 (Skerrett 2006) and at St Francois in 2008 (Adam *et al.* 2009). It is believed to be mainly resident at breeding sites but has been recorded as a vagrant to Bird, Aride, Cousin and La Digue (Skerrett *et al.* 2007).

Immediately south of the Greater Crested Tern crèche on the western coast lies an open sandy beach. We noted the presence of Black-naped Tern and counted 61 adults resting there. The following day I counted 77 adults on the same beach and a total of 120 birds on the island as a whole. Beyond the beach above the tideline was an open area with scattered low bushes. Here there were at least 12 nests with eggs and eight nests with chicks. No Black-naped Terns were seen elsewhere at Providence Atoll. In view of the number of adults counted, the Bancs Providence population is probably at least 40 pairs. Interestingly, the following day at Farquhar I learned that the breeding season was over and that there were no active nests at Farquhar.

Unpublished data from Island Conservation Society staff suggest breeding dates of January–May at Farquhar while at Alphonse it is February–April and June–September (A Duhec, pers. comm). Obviously there is too little information to say what the season might be at Bancs Providence though one might expect it to be similar to Farquhar, which lies only 65 km south southeast of Bancs Providence. Indeed, it might be one population with birds moving between sites.

In 1905, Black-naped Tern was recorded as a "shore breeder" at Providence (Gadow and Gardiner 1907). Dawson (1966) states that it was said to breed "exclusively in the Amirantes and at Providence in October and November in scrapes in the shingle or sand banks above high water mark" but the original source of this information is unclear. In 1967, Stoddart omits any mention of Black-naped Tern naming only Greater Crested Tern and Fairy Tern as breeding seabird species (Stoddart 1967). In 1976, presence was noted at Bancs Providence but no nests (C. J. Feare, pers comm). In 1996, it was noted and territorial activity observed but no nests were found (Skerrett 1996). In November 2001, a large number of adults (min. 130) was observed in mixed flocks with smaller terns, and the importance of Bancs Providence for the species, at least during the non-breeding season, was noted (Rocamora 2001).

The Seychelles population has previously been estimated at 125–205 pairs (Adam *et al.* 2009). Recent assessments by Island Conservation Society at Farquhar and St Francois, put the total as follows:

Table 2. Total Seychelles population of Black-naped Tern 2016.

Locality	Population	References
Aldabra	50–70 pairs	Betts 2000
Cosmoledo	30–50 pairs	Skerrett *et al.* 2001, Rocamora *et al.* 2003
Farquhar	87–137 pairs	Duhec and Jeanne 2016
Bancs Providence	*c.* 40 pairs	This paper
St François Atoll	18 pairs	Nogués, Narty & Férnandez 2016
St Joseph Atoll	10–20 pairs	Skerrett & Skerrett 2005
African Banks	*c.* 10 pairs	Rocamora & Skerrett 2001
TOTAL	245–345 pairs (735–1,035 birds per Wetlands International 2006)	

This is the first confirmed breeding record from Providence Atoll for more than a century, the first to identify Bancs Providence as the breeding site (as opposed to a vague reference to the atoll) and the first ever population estimate. Given the proximity of the atolls to the Farquhar-Providence populations (65 km apart) they may represent one population being around 50% of the total population for the African region.

Plate 9. Crab Plover.

Plate 10. Black-naped Tern.

Plate 11. Fairy Tern.

Plate 12. Black-naped Tern nest.

Other birds

A full list of bird sightings and counts can be accessed at the following link: http://ebird.org/ebird/country/SC?yr=all

Of particular note are the remarkably high numbers of Grey Heron at Providence (800 birds) and Bancs Providence (450 birds). It is possible Grey Herons take a heavy toll on nesting Black-naped Terns, as has been observed elsewhere including at neighbouring Farquhar Atoll. They may also predate Greater Crested Tern eggs and chicks but possibly less so due to larger size and the habit of this tern species in nesting in very dense colonies. Also noteworthy is the number of Crab Plover with counts of 220 at Point Gustave, Providence and 60 at Bancs Providence. Previous counts include 140 at Bancs Providence in 2001 (Rocamora 2001).

Fairy Tern breeds in small numbers at Bancs Providence, their nest sites hidden deep within vegetation unlike at other Seychelles breeding sites such as Aride, Cousin and Cousine. This nest site location is possibly to avoid detection by Grey Herons, absent at these other named islands.

One species of note in an earlier unwritten report is Roseate Tern *Sterna dougallii*. During a visit to Bancs Providence in 1976 a colony was observed where large numbers of chicks were being taken by Grey Herons (Guy Savy pers comm). No Roseate Terns were observed on this occasion, which is unsurprising as this species is present at breeding sites elsewhere in Seychelles only from late April to August.

Providence Atoll as an Important Bird Area (IBA) and protected area

The BirdLife International threshold for Black-naped Tern to qualify for consideration as an Important Bird Area (IBA) was originally set at just two birds (Fishpool & Evans 2001). This is too low, taking into consideration the new populations discovered by Island Conservation Society since the first inventory of IBAs in Africa was published (Rocamora and Skerrett 2001). It was proposed that it might be raised to 4–7 (Adam *et al.* 2009) and the threshold was raised to six in 2014 (Lascelles 2014). The breeding population at Bancs Providence clearly considerably exceeds the IBA threshold. The threshold for Greater Crested Tern is 500 birds and again, this survey suggests the Bancs Providence population comfortably exceeds this. The latest atoll-wide non-breeding population of Crab Plover of 280 birds is very close to the IBA criterion of 300 birds. It is also possible that Roseate Terns still breed at Bancs Providence.

The first draft of the IBA inventory for Seychelles included a shadow list of potential IBAs where more data was needed, and this included Bancs Providence (Rocamora & Skerrett 1999). The shadow list was approved by a national workshop but not included in the final inventory for Africa as the concept of potential IBAs was inconsistent with accounts for other countries (Rocamora & Skerrett 2001). The information collected during the ICS/*Pangaea* expedition clearly shows that Providence meets the criteria to be designated as an IBA, though equally clearly more information is needed. It is recommended that the area of an IBA should include the entire bank surrounding both Bancs Providence and Providence Island, thereby including not only the breeding tern colonies of Bancs Providence but also the important feeding areas for both terns and migratory waders, notably Crab Plover.

Bancs Providence is also worthy of protection and should be considered as a Special Nature Reserve protected by Seychelles law. The author has made this recommendation to high level officials in Seychelles and the preliminary responses have been encouraging.

Plate 13. Grey Herons.

Acknowledgements

I am grateful to the owners, management, officers and crew of MY *Pangaea*, in particular Todd Robinson, Todd Calitri, Richard Schumann, Ferdi Heymann, Igor Tatarinov and Marilize Nadauld. I am also grateful to Dr Jeanne A Mortimer, Island Conservation Society Expedition Leader, for efficient organisation of requirements for shore landings and liaison with MY *Pangaea* personnel.

I am grateful to Islands Development Company Limited for permission to land on Providence and Bancs Providence. I thank Dr. Gérard Rocamora for helpful suggestions and comments on the first draft of this paper. I am also grateful to Mike Evans and James Millett for assistance with queries concerning IBA thresholds.

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Pelagic bird monitoring using eBird: Some results from south-western India

by Dipu Karuthedathu & J Praveen

Launched in 2002 by the Cornell Lab of Ornithology and National Audubon Society, eBird captures observation data and provides sources for basic information on bird abundance and distribution.

Monitoring of pelagic birds from the Indian coast was started in 2010 (Praveen 2013). Trips during the period 2010–2011 focused mainly on getting the logistics right, creating a species list, learning field identification and understanding the complexities of pelagic birding in general. During this time, a single list of bird species and the total number of birds sighted in a trip was maintained. Each of these trips typically covered a distance of 50–150 km in a day. A single bird list for the complete trip resulted in data which we thought insufficient for detailed analysis in the future.

During 2012–2013, a more formal methodology was evolved, based on Bailey (1968), to estimate the abundance of birds at various distances from the coast (Karuthedathu *et al.* 2012). This method relied on collecting the time and GPS location of each sighting along with the number of birds sighted and mapping of these into distance bands. Analysis was done based on time slots spent in each distance band. However, this soon met with exceptions for cases where the ship route was from one port to another following a constant distance from the coast. This made all sightings fall in a single distance band thereby reducing its utility. In addition, analysis of this data was generally done using Microsoft Excel sheets and involved manual intervention. This added complexity and time consuming analysis.

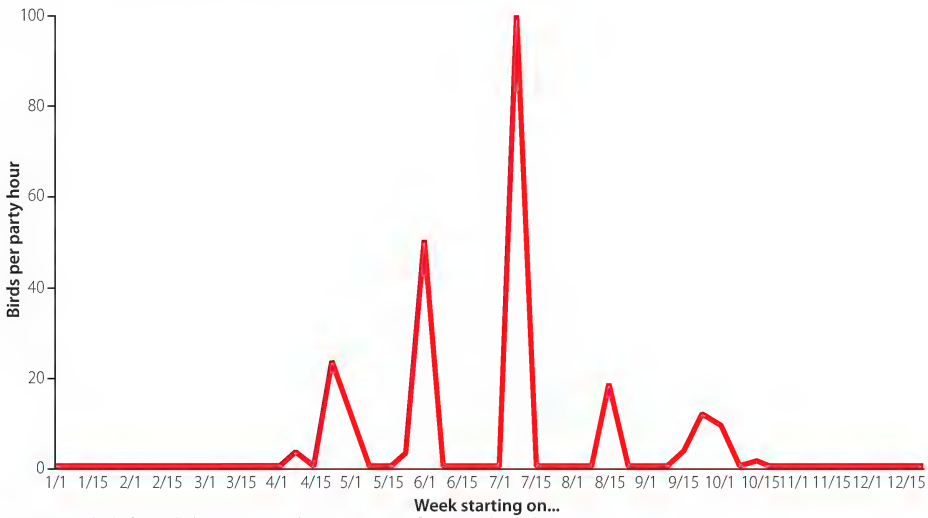

Figure 1. Flesh-footed Shearwater *Ardenna carneipes* from Kerala (India) coast.

In 2014, eBird started becoming popular in India as a tool to create birding lists and visualising trends of birds in space and time (Sullivan *et al.* 2014, Praveen & Quader 2015). The rapid uptake of eBird in recent years has made it one of the biggest databases of bird records in India with over 3 million records entered. Hence, instead of ad-hoc collection, a more sophisticated protocol backed by automated scripts to generate eBird lists was designed (https://github.com/dipukp/pelagic-ebird-list-creator). Pelagic bird lists entered into eBird enabled the use of standard eBird presentation to show trends. This streamlined and simplified both the data entry and analysis of pelagic data aligning them to those of land birds.

To illustrate what this means in practice the following examples have been generated using in-built tools from eBird. Shown are data for the Flesh-footed Shearwater *Ardenna carneipes* from the Kerala coast As evident, in Figure 1 this shearwater is present on the Kerala coast from April to October. Its numbers (birds/hour) increase towards June–Aug which coincides with the monsoon season when the seas around India are very productive.

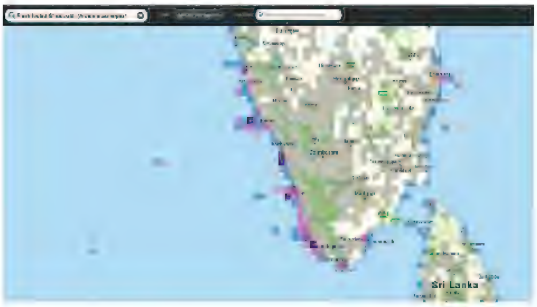

Figure 2. Spatial density of Flesh-footed Shearwater on the Kerala coast during April–October.

The spatial density of Flesh-footed Shearwater in the same area of the Kerala coast during April–October is illustrated in Figure 2. The intensity of the purple colour in the cells is proportional to the percentage of lists in which the species has been recorded. Grey cells indicate no birds were recorded despite surveying.

Most pelagic birders in India have taken up this methodology. Kerala (145 lists), Karnataka (54 lists) and Goa (47 lists) have started uploading in eBird lists using our protocol. We plan to continue this work in the coming months.

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Storm-petrels in South America and New Zealand

by Dr WRP Bourne

Palma *et al.* (2012) have recently concluded that the Fuegian Storm-petrel *Oceanites oceanicus chilensis* is a valid form, before discussing its complicated taxonomy. I reported over fifty years ago (Bourne 1962, 1963) that this form appears unacceptable, because "In the original description of *Procellaria oceanica* Kuhl (1820) took the name from a life-size drawing of a bird captured at 37°S off the mouth of the River Plate on 22 December 1768 during Cook's first expedition. This drawing is still preserved in the British Museum (Natural History) together with a detailed description of the bird by Daniel Solander (Lysaght 1959). According to the drawing it had a short wing of about 138 mm, which agrees with the small population occurring at the nearest breeding colony in the Falkland Islands... In the circumstances, since the dimensions of the type agree with one of the smallest northern populations, and since there has been some confusion over the priority of the other names applied to them (Sheard 1943), it seems best to refer all of them, including intermediate birds from South Georgia, to the typical form of the species".

A distinct form showing more white, the Pincoya Storm-petrel *Oceanites pincoyae*, has now been described by Harrison et 12 al. (2013) and is abundant in a limited area off Puerto Montt, Chile. The description appears acceptable, but some strange

Plate 14. Wilson's Storm-petrel © *N Cheshire*

things are said in the preamble. In the summary it is compared to the Fuegian Storm-petrel *Oceanites oceanicus chilensis*, discussed above. It then goes on to say that this is the first new petrel since Murphy's Petrel *Pterodroma ultima* in 1949 and Matsudaira's Storm-petrel *Oceanadroma matsudairae* in 1922, ignoring Barau's Petrel *Pterodroma baraui* in 1964, the Henderson Petrel *Pterodroma atrata* in 1996, and the Vanuatu Petrel *Pterodroma occulta* in 2001, among others, due to 'splitting'. It seems possible Murphy's Petrel was originally collected off western North America and named in the 18th century (Bourne 1995), and it is surprising the Auk did not notice all this.

It should also be noted that while Robertson *et al.* (2011) consider the New Zealand Storm-petrel is closer to *Fregetta* than *Oceanites*, in their Table 1 it seems equally close to *Garrodia*, so without a general revision of the storm-petrels it might be better left in its own genus *Pealeornis*.

Plate 15. Wilson's Storm-petrel © *N Cheshire*

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Plate 16. The expedition team L-R: Steve Copsey, Mark Cutts, Julia Springett (RNBWS), Roger Dickey, James Reynolds (AOS)

RNBWS involvement in seabird conservation on Ascension Island

by CPO Mark Cutts
(*Photographs by the author*)

In January 2016, Steve Copsey, Julia Springett and I joined members of the Army Ornithological Society (AOS) on their regular expedition to Ascension Island in the South Atlantic. This was my third trip - I'd taken part in 2012 and 2013 - and this time, in addition to the usual seabird monitoring activities, we had the specific goal of capturing adult Sooty Terns and attaching GPS logging devices to them.

Our aim was to try and find out exactly where the birds forage during the breeding season. Sooty Terns *Sterna fuscata* share parenting duties - incubation, brooding and chick feeding - and while one parent is 'on- egg' the other is out at sea. This period can last up to a week, dependent on food availability, and exactly where the birds feed is important to the Ascension Island Government as it considers further protection zones under the newly proposed Marine Protected Area (MPA). It is hoped these will be designated and put in force by the end of 2017.

The GPS devices take satellite fixes at pre-programmed intervals, providing a position of the bird carrying the device to within 5–10 metres. They can be programmed to obtain as many fixes as required but this is limited by the size of the SD card and the amount of battery power available. Although the battery is solar powered one cannot be certain that it will always be exposed to sufficient sunlight once attached, as the birds sometimes preen their feathers in a way that covers the solar panels. This is important since the logger has to power up every time it wants to take a fix and it will automatically re-schedule the collection of GPS data if the battery power levels fall too low.

The device weighs 3.7 grams and it is deployed on the bird using slip elastic leg harnesses that pass from the back of the device under the bird and inside the thighs. The two elastic ends are then brought up to the front of the device where they pass through a fishing line loop and secured through a crimped 1.5 mm aluminium ferrule which is then superglued. This is a tried and tested method after much experimentation on Sooty Terns in the Seychelles by Professor Chris Feare.

The attachment of the GPS units was carried out under special licence by Dr Eliza Leat of Ascension Island Government Conservation Department (AIGCD). Prior to the deployment of the devices we had to decide which birds to target, based on three principles: first, the bird must be healthy, and this was assessed in the hand using a simple checklist. Secondly, the bird must weigh at least 180 grams, and thirdly it would have to be as close to leaving the nest to forage as we could possibly judge - this last being the most challenging.

In order to predict when Sooty Terns would swap incubation duties, we needed to keep watch on the target nests. Our expedition was for only ten days so there wasn't much time to develop a reliable nest monitoring routine to enable us to predict when a bird was close to the end of its incubation shift.

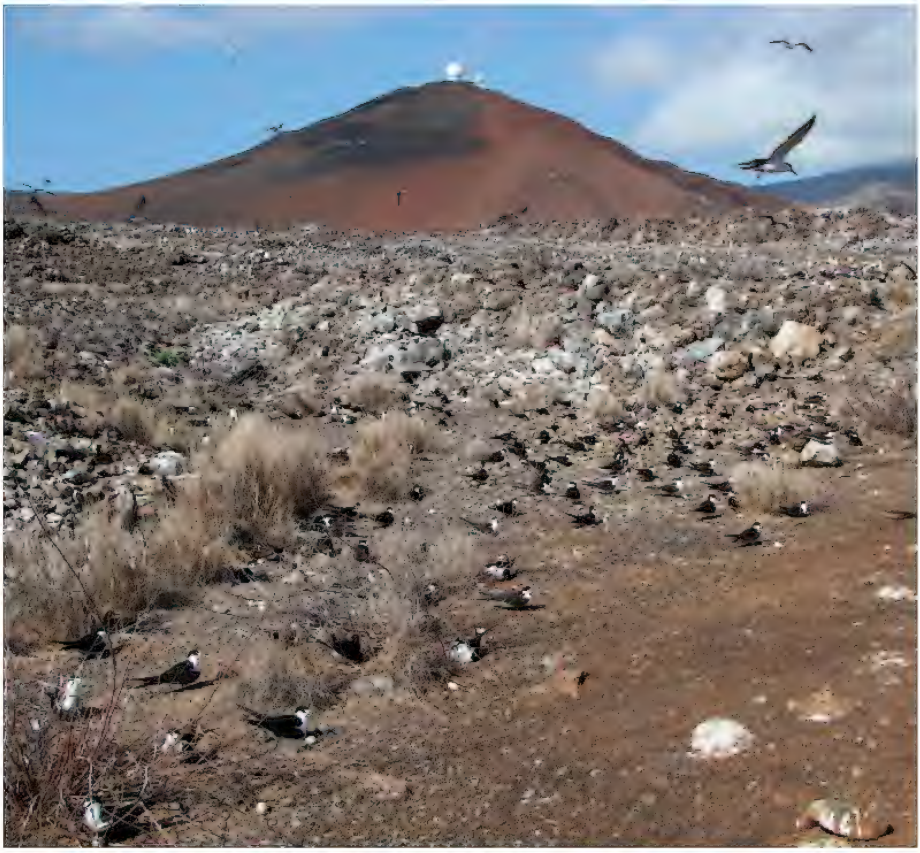

Plate 17. Sooty Tern nest site, Mars Bay.

Our aim was to deploy 10 GPS loggers before we returned to the UK, leaving the staff of the conservation department the task of retrieving the loggers and downloading the data. We began by identifying potential sub-colonies of birds that were at the correct stage of incubation (i.e. far enough into the 30-day incubation period that they would not abandon if caught, but not so advanced that hatching was imminent). Using a long handled landing net to catch the birds we marked 10 birds per plot with green marker pen on their white breast plumage. This mimicked the green regurgitant that many of them produce as a defence mechanism when handled. At the same time we marked the associated nest with numbered flagging tape. We also marked the eggs in each plot from 1–10 with black permanent marker within the pigmentation on the blunt end, a tried and tested method that does not result in abandonment. This allowed us to identify the exact egg of our target birds to verify if the pair had abandoned their breeding attempt. Five nest plots were identified in this way, providing us with 50 pairs of breeding birds from which to choose the 10 birds that we would use for GPS deployment. Although the location of each plot was chosen at random, we knew that they would require regular observation and with this in mind we selected areas with good vantage points allowing us to monitor each plot from an elevated position without disturbing the birds.

As part of the ongoing AOS fieldwork we ring over 2000 Sooty Terns each year, and this year we included those chosen for GPS deployment, for we knew that the markings on the breast plumage would not endure for the entire study. Each bird was also given a uniquely numbered BTO ring on its left leg and a uniquely lettered interrex ring on the right. The latter was yellow with two black letters, which allowed us to identify individual birds from a distance. When all 10 birds at a plot had been processed and the 10 eggs marked, a map was produced of the nest plots with positions of our focal nests, plus topographical features of the plot.

Plate 18. Sooty tern and Land Crab, Mars Bay.

Plate 19. Sooty Tern geotagging.

Plate 20. Sooty tern chick.

We now had five nest plot areas which were identified from A to E, and 50 marked eggs and birds. All we needed to do now was to monitor the movement of each bird and wait for the best moment to attach the GPS device.

As there was other survey work to carry out, we decided that the nest plots would be observed twice a day. Within two or three days we noticed that some adults had already swapped with their partners, so even at this early stage of the study we already had a number of candidate birds in attendance that might be suitable for device deployment.

After another couple of days it was decided that these birds (all identified by their nest marker and the numbered egg on which they sat) would be captured, and checked for health and weight.

The first birds we netted were under the weight requirement; disappointing but not wholly unexpected as we knew that the birds were well into their 'egg-time' and would have used up much of their fat reserves. We eventually found birds of the right weight and the task of attaching the GPS devices began.

Plate 21. Terns in flight, Mars Bay.

For each bird that received a device, another control bird was selected at random from outside the nest plots, given a BTO metal ring and a coloured Interrex ring, and its nest noted and observed as for the others. The data collected from the control and experimental birds will then be compared to determine the effect of the GPS device on the carrier birds.

Following the attachment of the GPS device and the release of the bird, each bird took a moment to re-adjust its feathers before flying off, soon returning to the egg.

Over the space of four days we deployed the required ten devices and then it was time to return to the UK. The responsibility for observing the nest areas was then handed over to members of the AIG Conservation team.

After our return from the island we learned that two devices had been recovered and that the data was in the process of being recovered. For the remaining 8 birds the GPS devices probably fell off, for the slip elastic used was photodegradable, and those devices will probably never be seen again.

All in all this was an excellent project for a layman field worker such as myself. We learned a lot and we intend to return in late 2016 to deploy another 40 loggers, using refined methods and approaches in the field to maximise the efficacy of the GPS deployment on future adult terns. In a future article I hope to provide an update on the study and show where these birds go to forage during their break from incubation.

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Plate 22. Sooty tern drinking.

Plate 23. Heard Island from the east.

Heard Island - Australia's most remote sovereign territory

by Captain Neil Cheshire, MN
(*Photographs by the author*)

Heard Island is situated in the Southern Ocean at 53.1S 73.5E, 2,350 nm SW from Cape Leeuwin, Western Australia, 250 nm SE from the large French island of Kerguelen and 900 nm N from Antarctica. It lies south of the Antarctic Convergence, in the path of deep low pressure systems which cause frequent gales and high seas (the furious fifties). Precipitation occurs on three days out of four and snow lies at sea level from July to September. Most of the island is one large, still active volcanic massif 'Big Ben' of which Mawson Peak at 2,745 metres is the highest point. Usually the island is shrouded in fog, rain or snow clouds so a clear view of 'Big Ben' is rare, but on a fine day it is a magnificent sight.

In size the island is 43 km x 19 km - an area of about 368 km^2, 70% of which is covered with glaciers and permanent snow, with clear ground and significant vegetation near sea level. There are no trees or shrubs, the most widespread vegetation being *Poa cooki* a tussock grass, *Azorella selago* a cushion plant, and the aptly named *Pringlea antiscorbutica* (Kerguelen Cabbage), discovered by Dr. Pringle and found to be useful for the prevention of scurvy.

History

Heard Island was not discovered until the mid-nineteenth century. Commander James Cook RN aboard HMS *Resolution* passed about 53 nm away on 13 February 1773, within visible range on a clear day, and Peter Kemp aboard the British sealing/whaling ship *Magnet* claimed to have seen land south of Kerguelen in November 1833, but he did not investigate and unfortunately his journal is lost. However, in the 1850s sea trade between the northern hemisphere and southern Australia increased due to the Victorian gold rush, and with increased efficiency and strength following the introduction of wire rope for rigging, sailing ships were venturing further south on composite great circle routes to take advantage of the strong westerly winds. On 25 November 1853 Captain John Heard aboard the US sailing vessel *Orienta*, on a voyage from Boston to Melbourne, discovered the island that took his name, though he did not land, and his discovery was promulgated in the Melbourne Argus on 24 December 1853. Just six weeks later Captain William McDonald on the British vessel *Samarang* discovered McDonald Island, a small outlying island 30nm west of Heard Island (which McDonald also sighted). He was unable to land on either because of bad weather (Downes and Downes 2006) but he registered his discoveries with the British Admiralty. Heard made many requests to the US State Department, the US Naval Observatory and even the President to register his discovery and claim a bounty, but was unsuccessful. The US State Department fobbed him off with a dismissive letter relative to his "alleged discovery of islands", reminded him there was no reward, but suggested that under an Act of Congress he could register any discovery of guano deposits he might wish to exploit (Green 2006).

Australian sovereignty granted

The progression of the sovereignty of Heard Island is obscure but by the early twentieth century it was being inked in red in atlases. After World War ll, Australia complied with a request from the United Kingdom to establish a base and occupy Heard Island. A ceremony of Australian occupation was held at Heard on 26 December 1947 and formal sovereignty was transferred from the UK to Australia in 1950. The ANARE (Australian National Antarctic Research Expedition) base was set up at Atlas Cove on the relatively sheltered northwest corner of the island in December 1947 and was occupied continuously until March 1955. The island is now unoccupied but there are regular expeditions by the Australian Antarctic Division and occasionally by other groups.

Plate 24. McDonald Island from the west.

Plate 25. Atlas Cove, Heard Island; King Penguins and Jacka Glacier.

In early 2005 P&O Australia chartered the *Oceanic Viking* from Norwegian owners and supplied vessel and crew to the Australian Customs and Border Protection Service for long range surveillance and fisheries protection, mainly around Heard Island, Macquarie Island and the Australian Antarctic Territory. I made four seven to eight week voyages to the Southern Ocean in the ship between 2005 and 2007 and managed four brief landings of one to two hours duration on Heard Island in April 2005, July 2005, February 2006 and March 2007. Our fishery protection role was in collaboration with the French which gave me the bonus of visits to Kerguelen and the Crozet Islands.

Landing at Heard is very weather dependent. We were fortunate that operating in the general area for weeks we were able to utilise suitable days between the frequent gales. The four landings I made were all at Atlas Cove while the ship remained in Atlas Roads. The ship was not anchored, the holding in volcanic sand being poor, but was held in dynamic positioning mode ready for a quick departure should the weather deteriorate.

The pristine nature of Heard Island, which unlike many sub-Antarctic islands has no introduced vertebrates, gives it special conservation status and it is managed as an International Union for Conservation of Nature (IUCN) 1A Reserve, while a large marine reserve is designated within the Heard Island EEZ. Apart from two introduced grasses the vegetation is original. The fisheries officers on board acted as wardens during our landings. Clothing was carefully examined to check for any adhering seeds; boots were scrubbed to remove any earth and we walked through a tray of disinfectant before boarding the shore boat.

The approaches to Atlas Roads are impressive with high cliffs of Laurens Peninsula to the west, snow covered in winter and showing several waterfalls during spring and summer, and the large rock promontory of Rogers Head to the east. Atlas Cove affords the most sheltered landing on Heard with very little swell and a gently shelving beach of black volcanic sand. Close approach to any bird or mammal was not permitted, but by sitting still, King and Gentoo Penguins in their curiosity came within an arm's length, and even pecked at my boots.

Plate 26. Gentoo Penguin, Atlas Cove.

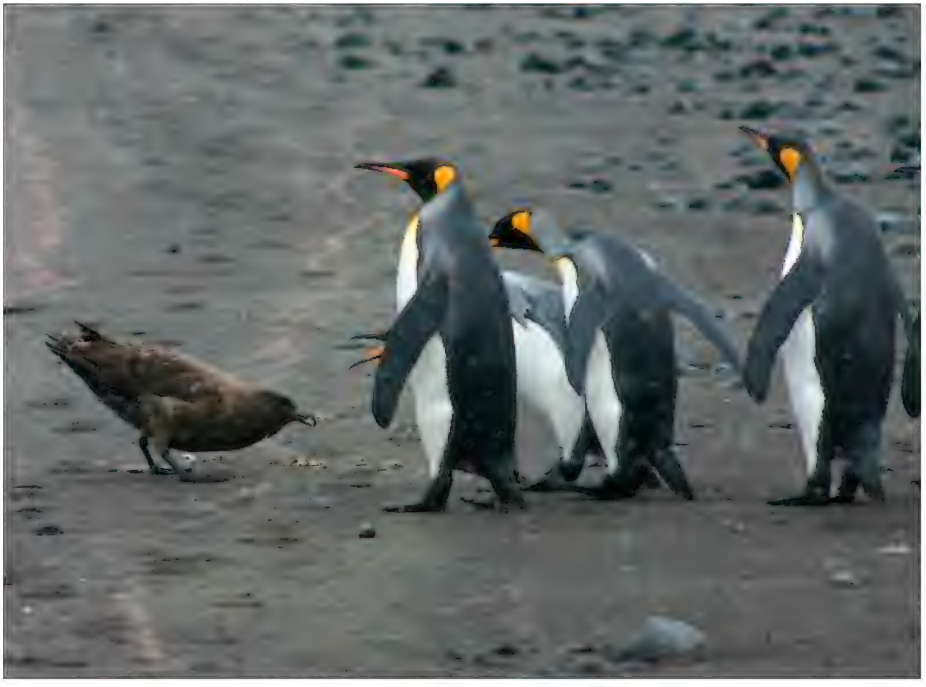

Plate 27. Southern Skua and King Penguins, Atlas Cove.

Seabirds

Heard Island is a very important seabird breeding island. A total of 19 species of seabirds breed on Heard and McDonald Islands with another 28 species recorded within the Heard Island EEZ (Woehler 2010).

I was keen to see and photograph the endemic Heard Island Shag, part of the Imperial Shag complex. I saw a few fly past in Atlas Roads and within five miles of the coast while in April and July there were 20 to 30 birds ashore at Atlas Cove. Most of the July birds were in their showy breeding plumage with recurved crests, bright orange caruncles at the base of the bill and large pink feet. Egg laying starts in mid to late October. With a breeding population of just 1,100 pairs and only a few breeding sites on a single island they are one of the world's rarest cormorants.

A few Black-billed Sheathbill were scavenging around Atlas Cove during each visit. Heard Island birds are an endemic sub-species *nasicornis*, distinguished by a smaller area of bare black skin on the lores and above the eye compared with other sub-species found on Kerguelen, Crozets and Marion Islands. An immature was found on board on 25 April about 10 km from McDonald Island. It remained for two days, ate food scraps and disappeared when the ship was 300 km SSW from Heard.

Table 1. Heard Island breeding birds. After Woehler (2010).

Species	Minimum breeding population (pairs)
Wandering Albatross *Diomedea exulans*	1
Black-browed Albatross *Diomedea melanophris*	600
Light-mantled Sooty Albatross *Phoebetria palpebrata*	500
Southern Giant Petrel *Macronectes giganteus*	2,500
Cape Petrel *Daption capense*	1,000–2,500
Antarctic Prion *Pachyptila desolata*	100,000
Fulmar Prion *Pachyptila crassirostris*	10,000
Common Diving-petrel *Pelecanoides urinatrix*	1,000–10,000
South Georgian Diving-petrel *Pelecanoides georgicus*	10,000–100,000
Wilson's Storm-petrel *Oceanites oceanicus*	Breeds abundantly; no numbers
King Penguin *Aptenodytes patagonicus*	80,000
Gentoo Penguin *Pygoscelis papua*	16,000
Rockhopper Penguin *Eudyptes chrysocome*	10,000
Macaroni Penguin *Eudyptes cxhrysolophus*	1,000,000
Heard Island Shag *Leucocarbo nivalis*	1,100
Black-billed Sheathbill *Chionis minor nasicornis*	1,000
Southern Skua *Catharacta antarctica*	500
Antarctic Tern *Sterna vittata*	100–200
Kelp Gull *Larus dominicanus*	250

Plate 28. Antarctic Tern, Atlas Cove.

Plate 29. Black-faced Sheathbill, Atlas Cove.

Plate 30. Heard Island Shags, Atlas Cove.

Antarctic Terns were present in small numbers during all my four visits and most were seen hawking over the Cove with occasional shallow plunges to catch small fish. On 26 April 2005 I photographed a pair on the beach still in breeding plumage with presumably a male presenting a fish to a female. Woehler (2006) gave details of several sightings of Antarctic Terns at Heard with yellow tarsal flags indicating they had been captured and marked at Bird Island, South Africa. My records on 22 July 2005 indicate that not all of the population migrates and some over-winter. Birds seen at this time were showing moulting primaries.

Sealing

After the discovery of Heard Island in 1853, sealers mainly from the US were soon to exploit the huge population of Southern Elephant Seals *Mirounga leonina*. The first landing on Heard in February 1855 was made from the US sealing vessel *Corinthian* commanded by the grandly named Captain Erasmus Darwin Rogers. In the peak year of 1858–9, 24 vessels were involved and about 27,000 barrels (3.2 million litres) of elephant seal oil were shipped out. At about six barrels from each good sized bull Elephant Seal this equates to the killing of at least 5,000 animals in a single year. By 1877 the numbers of seals were so reduced as to make sealing uneconomic (Downes and Downes 2006).

Elephant Seals have now recovered from the depredations of the sealing era. During each of my visits to Atlas Cove about 30–40 were hauled out beyond the beach in amongst the tussock grass. The large males from 3,000 to 4,000 kg showed signs of aggression and I gave them a wide berth. Females were much smaller at 400–900 kg and were mostly docile. Small numbers of Antarctic Fur Seals *Arctocephalus gazella* were also seen. One of our party turned his back on a male fur seal a few metres away

Plate 31. Antarctic Fur Seal, Atlas Cove.

Plate 32. Southern Elephant Seal; young male.

Plate 33. Southern Elephant Seal; adult male.

Plate 34. Leopard seal, Atlas Cove.

and was attacked at lightning speed. Fortunately he suffered only minor bruising and was protected by his heavy polar jacket, which nonetheless had the sleeve shredded. In July a single adult Leopard Seal *Hydrurga leptonyx* was hauled out dozing in the sun. Given its reputation as an ambush predator, its reptilian appearance and its size - two to three metres - I maintained a discreet distance and kept a patch of volcanic rocks between myself and the animal whilst taking photographs.

The wildlife and near pristine condition of Heard Island are now mostly secure though there is always vulnerability to volcanic events. Although the island is unoccupied for most of the time its very remoteness provides protection. Visits are strictly controlled by the Australian Antarctic Division and regular maritime patrols have reduced illegal fishing activity and the likelihood of illegal landings. Attitudes to wildlife have changed over the years, though as recently as the ANARE research station years (1947–1955) a more relaxed regime prevailed. Elephant Seals were killed to provide food for the sledge dogs (1kg meat per dog per day), and with supply ships few and infrequent, the station staff supplemented their dry and tinned rations with Elephant Seal meat "as good as rump steak", while penguin eggs were used for omelettes. The station log records that for Christmas dinner in 1948 the main course was roast seasoned skua (Munro 2006).

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Plate 35. White-tailed Tropicbird.

The Army Ornithological Society (AOS) on Ascension Island - a twenty-six year study of seabirds

by Lt Col Roger Dickey, Chairman of AOS
(*Photographs by Mark Cutts*)

Post 1982, interest in South Atlantic seabirds was rejuvenated, and Ascension Island became a particular focus of interest. Surgeon Lieutenant Commander DG Bruce from the hospital ship HMS *Hecla* reported on seabird foraging ranges in *Sea Swallow* (Bruce 1982), Major PJ Hubert reported on Ascension seabirds in *The Adjutant* (Hubert 1982), while Squadron Leader Blair led an RAF Ornithological Society expedition to Ascension in 1987. In 1990 AOS, guided in seabird monitoring techniques by Drs Philip and Myrtle Ashmole and Ken Simmons, began the first of a continuous series of expeditions to the island, initially every 18 months and currently, every 9.6 months - this to reflect the breeding cycle of Sooty Terns (originally *Sterna fuscata* and now *Onychoprian fuscata*), which became the focus for future AOS work.

With a global population numbering 23–25 million birds, the Sooty Tern is a far from endangered species. It breeds on oceanic islands circum-equatorially in huge numbers and Ascension Island in the South Atlantic is no exception. However, in 1815 cats were introduced to the island by the marine garrison to help control the large numbers of Black Rats, and also to control mice thought to have been introduced following the foundering of HMS *Roebuck* in 1701. The devastating effect of feral cats on the seabird population was obvious and only Sooty Terns remained as a breeding population on the main island, with hundreds of dead birds to be cleared at the start of each expedition.

The Sooty Tern is a sentinel species, sharing many biological traits with other seabird species on the island and acting as a barometer of conditions both on the breeding habitat (i.e. the island) and on migration between breeding seasons (i.e. the open ocean). Hence the need to collect long-term data on population size, predation, survival and diet. Data collected over the early years supported the Birdlife International initiative to provide the Ascension Island Government (AIG) with a conservation plan which ultimately led to feral cat eradication between 2002 and 2004. AOS have now taken the lead on the AIG Biodiversity Action Plan (BAP) for work with Sooty Terns and Brown Noddies *Anous stolidus*, in partnership with AIG and RSPB and working with other species (principally Ascension Frigatebird *Fregata aquila* and Masked Boobies *Sula dactylatra*), assisting in their monitoring and survey work. With the introduction of a Conservation Department (AIGCD) in 2002, AOS now works very much in support of AIG aims and priorities. In 2008 AOS took on Dr James Reynolds of Birmingham University as its Scientific Advisor, to provide governance and credibility to our research, and he became an Honorary Member of the Society a few years later. Expeditions are planned and coordinated by AOS but they are open to members of the other two service ornithological societies, RAFOS and RNBWS. Without their help in time, effort and often financial assistance to this self-financed project, the expeditions would be hard pressed to continue.

AOS has achieved many landmarks in its work to date. Highlights include:

- finding the first Ascension Frigatebirds to breed on the mainland of Ascension Island since Charles Darwin's visit to the island in 1836. The birds were discovered by Major Andrew Bray on the Letterbox Peninsula during the December 2012 AOS expedition;

Plate 36. Ascension Island Frigatebird with Sooty Tern chick.

- documenting for the first time the occurrence of sub-annual breeding (every 9.6 months) in the Sooty Tern. This species breeds throughout the tropics on remote islands but at no other location do individual birds breed sub-annually. Jim Chapin in the 1950s and Philip Ashmole in the 1960s described the phenomenon but both only stayed on the island for short periods. AOS we were able to show from successive re-captures of known birds at equivalent breeding stages and each breeding season that individuals were indeed breeding sub-annually. This finding raises many questions in the minds of reproductive physiologists about how Ascension Island Sooty Terns can breed, moult, migrate and breed again in less than 12 months;
- establishing a morphometric technique to sex Sooty Terns without having to take blood and then send the samples to the laboratory. Through taking blood samples and a series of morphometrics from birds AOS and Birmingham University were able to derive a discriminant function of known-sex birds that can be used with over 80% accuracy to sex birds *in situ* in the field during the breeding season. This is of immense value because it means that it is possible to sex focal birds with some confidence while engaged in various investigations;
- documenting for the first time a condition in Sooty Terns and Masked Booby where the tongue protrudes through the skin beneath the floor of the oral cavity where it remains permanently external to the buccal cavity. Eventually the tongue dries out and becomes necrotic in a condition called sublingular oral fistulation. Since the discovery of the condition in only the second and third species to date (the first being the Stitchbird or 'hihi' *Notiomystis cincta*), a number of other Charadriiformes such as gulls and terns have been found with the condition, this as a result of the AOS bringing it to the attention of the ringing community;
- using the long-term census data from the Sooty Tern population to draw attention to the impacts of predators (feral cats, Black Rats and Common Mynas *Acridotheres tristis*). It has been shown that the Sooty Tern population size has remained stubbornly static since the cat eradication and there has been little sign of any 'bounce back' so far;

Plate 37. Sooty tern, Mars Bay, January 2016.

Plate 38. Masked Booby.

Plate 39. Masked Booby ringing project.

Plate 40. Common Myna.

Plate 41. Brown Noddy.

Plate 42. White Tern.

- providing a new census technique for Masked Boobies on the mainland by estimating nest density from images on Google Earth. This work was coupled to 'on the ground' counting of the booby population at Letterbox through nest counts and ringing and re-trapping of adult birds. Since the cat eradication numbers of Masked Boobies have increased from zero to several hundred pairs;
- the discovery that White-tailed Tropicbirds *Phaethon lepturus* breeding on Ascension Island are phylogenetically distant from other Atlantic populations of the species, including the birds that breed in the most northern population in Bermuda. This was part of a larger study that examined phylogeography of the species across Atlantic, Indian and Pacific Oceans. Curiously, the most genetically distinct population is found on the island of Europa in the Mozambique Channel in the Western Indian Ocean where birds appear genetically unrelated to others relatively close by. Their origins remain unresolved;
- recording the increase in numbers of Brown Noddies *Anous stolidus* breeding in close association with the Sooty Tern colonies. Work continues to study whether this close association persists and indeed whether noddies are now synchronising their breeding seasons with the sub-annually breeding terns.

Ongoing work on Ascension Island includes:

- the GLS tracking of Sooty Terns;
- estimating the relative abundance of rats in order to investigate mesopredator release and its population consequences;
- a long-term study of contour feathers;
- continued collaboration with Chris Feare, who is doing similar work in the Indian Ocean.

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Interaction between lizards and breeding Cory's Shearwaters on Selvagem Grande (NE Atlantic Ocean)

by Francis Zino & Manuel Biscoito
(*Photographs by Francis Zino*)

The Selvagen Islands lie in the NE Atlantic Ocean between Madeira and the Canaries (Figure 1). There are three main uninhabited islands (Selvagem Grande, Selvagem Pequena and Ilhéu de Fora) and several islets. Portuguese sailors under the orders of Prince Henry the Navigator discovered them in the 15th century and until the 20th century they have been owned by several Madeiran families. In 1967 Paul Alexander Zino bought the hunting rights of the juvenile Cory's Shearwaters on a 3 year lease, to protect them and stop all hunting. In 1971 the islands were acquired by the Portuguese government who declared them a strict nature reserve. Although the

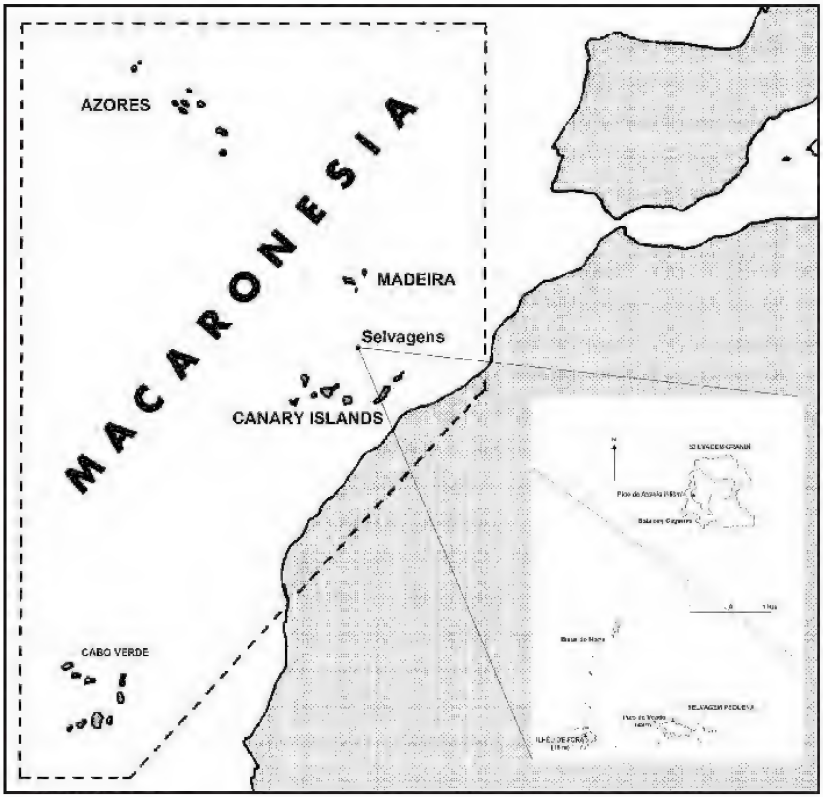

Figure 1. Map of the area.

sovereignty of the islands is not in dispute, Spain and Portugal maintain a disagreement as to whether the islands are islands or rocks in the light of the United Nations Convention of the Law of the Sea (article 121 of the Montego Bay Convention 1982). Should they not be considered islands, the southern limit of the Madeiran Exclusive Economic Zone, unilaterally set at mid-distance between the Selvagens and the Canaries, would withdraw almost eighty miles to the north.

The Selvagens are the summit of two volcanoes that ascend from a depth of 4000 m and were formed in the Oligocene epoch, some 30 million years ago. During the early to mid-Miocene volcanic hiatus (12–24 million years ago) the top of the Selvagem Grande volcano was beneath sea level, as evidenced by a layer of marine carbonate sediments containing fossils (Geldmacher *et al.* 2001).

The islands are the breeding ground for five species of Procellariiformes: Cory's Shearwater *Calonectris diomedea borealis*, White-faced Storm-petrels *Pelagodroma marina hypoleuca*, Barolo's Shearwater *Puffinus baroli*, Bulwer's Petrel *Bulweria bulwerii* and Madeiran Storm-petrel *Oceanodroma castro*. A possible sixth species also breeds in Selvagem Grande, Swinhoe's Storm-petrel, *Oceanodroma monhorris*. Cory's Shearwaters (29,540 pairs) and White-faced Storm-petrels (>80,000 pairs, 19,000 pairs on Selvagem Grande and 62,550 pairs on Selvagem Pequena and Ilheu de Fora) form the two most important colonies (Zino & Biscoito 1994; Granadeiro *et al.* 2006; Catry *et al.* 2010), the latter having the Selvagens as its northernmost area of distribution in the Atlantic Ocean.

Since the 1963 expedition organised by the Museu Municipal do Funchal, extensive studies have been carried out on Cory's Shearwaters (see Monod (1990) and Mougin & Mougin (2000) for details). On specific study areas on Selvagem Grande, numbered nests have been followed during breeding since 1971 and the breeding success monitored (Zino *et al.* 2008).

The islands also harbour two species of endemic reptiles, one lizard, *Lacerta dugesii selvagensis* and one gecko, *Tarentola boettgeri bischoffi* (Bischoff *et al.* 1989; Carranza *et al.* 2002). The latter is nocturnal and has never been observed interacting with birds.

Three vertebrate species, goats and rabbits, intentionally introduced by the Portuguese explorers and mice, unintentionally introduced from passing boats, occurred in the past in Selvagem Grande only. Goats disappeared at the turn of the twentieth century (Sarmento 1906) and rabbits and mice were eradicated as result of a very successful project launched by the Parque Natural da Madeira in 2002 (Oliveira *et al.* 2003).

On Selvagem Grande we observed, prior to 2000, lizards eating broken bird eggs and scavenging dead birds. Although no estimates are available, lizards may always have had a negative impact on bird's breeding success as they had been observed on several occasions rolling eggs out of the nests in order to crack their shell and gain access to their contents. This impact had never been considered when calculating breeding success.

In 2005, in the course of daily inspections of the study nests, we found two juvenile Cory's Shearwaters and one Bulwer's Petrel, which were well on one day, eviscerated the following day with no other signs of trauma (Plate 43). Over the many years that we have observed the study areas this was the first we had seen of this. This could no longer be attributed to mice, which were eradicated three years previously. Beetles and cockroaches would not act so quickly and so the only plausible explanation was that they had been eaten by lizards.

Since the eradication of mice and rabbits and especially in the three years following eradication, we have observed a dramatic increase in the lizard population of Selvagem Grande. This has been empirically measured by observation on the number of lizards scavenging food around the houses and any broken egg throughout the island.

Plate 43. Eviscerated juvenile Cory's shearwater.

In July 2007, a live, newly hatched Cory's Shearwater chick was observed being predated/scavenged by a group of more than 20 lizards (Plate 44). Starting from the 'umbilicus' lizards had opened the abdominal wall and were eating the viscera. On another nest, a lizard was seen emerging from a hatching egg (Plate 45), where it had started eating the chick inside the egg as it was hatching.

Such behaviour had never been observed by us before on these islands and may be related to the increase of the lizard population after mice and rabbit eradication. Increases in lizard populations after eradication projects have been observed in Round Island, Mauritius and Mana Island, New Zealand (Newman 1994; Bullock *et al.* 2002), but bird predation was not reported.

Plate 44. Lizards eating a live newly hatched juvenile Cory's shearwater.

Plate 45. Lizard emerging from Cory's shearwater egg.

Plate 46. Lizard eating nectar (pollinating) the Macaronesian endemic *Rubia fruticosa*.

The only predator of breeding Cory's Shearwaters on Selvagem Grande considered in the past was the Herring Gull, which was responsible for 5% losses (Zino *et al.* 1987). This newly found predation by lizards has been quantified to another 5% loss (Matias *et al.* 2009). Nevertheless there has been a significant increase in Cory's Shearwater breeding success after mice and rabbit eradication (Zino *et al.* 2008), which means that those rodents had a significant negative effect on breeding. Thirteen years have now passed since mice and rabbit eradication and so it is time to reassess the lizards' impact on Cory's breeding success. Since both species have coexisted there for millions of years, a new state of equilibrium is expected to occur and we are not worried about the future of either species.

This is a good example of the complexities and lack of understanding of an island ecosystem and how important a thorough in-depth pre-eradication study of the whole habitat is, before eradication starts. Continued monitoring of this situation in the future is important, as well as monitoring of the island flora, as lizards are also known pollinators and seed dispersers (Plate 46) (Olesen & Valido 2003; Nogales *et al.* 2005).

Acknowledgements

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Westray, Orkney - uncovering the UK's newest sea-watching hotspot

by Professor Russell Wynn
(*Photographs by the author*)

Introduction

It may seem that exciting avian discoveries are a thing of the past in our increasingly over-crowded islands, but there are some far-flung parts of the UK that still have the potential to throw up a surprise or two. In 2013 I decided to initiate a project to explore the birding potential of Westray, at the northwest fringe of the Orkney archipelago. Its geographic location (Fig. 1) and prominent headland sticking out to the northwest (Fig. 2) looked good for sea-watching, and in recent years it has become evident that anywhere in the Northern Isles has the potential for land bird vagrants from all points of the compass.

So there lay the challenge: an island in a prominent geographic location with potential for new discoveries, over 75 km of coastline but only one resident birder, and some spectacular scenery with internationally important seabird colonies. I planned my first visit around peak spring migration (13–27 May 2013), with a further spring trip in 2014 and an autumn trip in 2015, in order to build up a picture of migration on the island. This article provides an overview of some of the highlights during these three expeditions, in the form of diary excerpts from my evening log.

14 May 2013

Weather: SW3–5; showers and sunny spells with a drier afternoon.

My nine-hour journey north from southern England was largely uneventful, although the final hop from Papa Westray to Westray gave me a good view of the island I was about to explore (this 'hop' is apparently the world's shortest commercial flight, and according to my watch took about 80 seconds from take-off to landing!). It is worth noting that Orkney is almost 1,000 km north of my New Forest home, and is therefore roughly as far away as Barcelona. The temperature on the island is about 9°C (roughly equating to the sea temperature), and it only deviates a few degrees away from this during my trip. I'm based at the Pierowall Hotel in the centre north of the island, which is a comfortable and highly convenient base. Pierowall is actually at the hub of

Figure 1. Westray in the Orkney Archipelago.

Figure 2. The northern Orkney Archipelago, slowing the location of Westray relative to the adjacent islands.

four 'sectors' of the island, with Noup Head to the northwest, the Aikerness Peninsula to the northeast, the Westside to the southwest, and the longest arm extending southeast to Rapness. Most of the island is dominated by pastoral farming, with short grass or newly sown fields bound by drystone walls and barbed wire. Patches of more sheltered habitat, e.g. iris beds, gardens and small coastal valleys (geos) are widely spaced, necessitating a lot of walking. Prior scrutiny of the map indicates that to cover an individual sector thoroughly on foot will take most of a day, so each morning I will have to think carefully about strategy in light of weather conditions and what is happening elsewhere in the region. What I don't have to worry about is crowds of people, as although the island has over 600 inhabitants, few venture onto the coast during this busy period in the farming calendar.

Plate 47. The spectacular cliffs at Noup head.

Today, the southwest breeze and frequent showers see me head to the relatively sheltered northeast coast along the Aikerness Peninsula, which comprises a mix of open habitats including rocky shore, boulder beach, sandy bays, maritime heath and small lochs. Impressive numbers of Great Northern Divers *Gavia immer* are present offshore with at least 21 in Papay Sound, most in their spectacular summer plumage. This shallow, tidally dominated passage is a traditional staging post for this species before they head to breeding grounds in Iceland and Greenland. Careful scanning also reveals 150 Black Guillemots *Cepphus grylle* and 115 Arctic Terns *Sterna paradisaea* in this area. Three Red-throated Divers *Gavia stellata* are nearby in Bay of Pierowall and a drake Scaup *Aythya marila* is on Loch of Burness, with over 100 Tufted Ducks *Aythya fuligula* and three Goldeneye *Bucephala clangula* split between there and the adjacent Loch Saintear. Waders also feature prominently during the day, with a Greenshank *Tringa nebularia*, a summer-plumaged Spotted Redshank *Tringa erythropus* (very rare in spring on Orkney) and a few Black- and Bar-tailed Godwits *Limosa limosa* and *L. lapponica* on Craig Loch, plus a roosting flock of 160 Purple

Sandpipers *Calidris maritima* at Bow Head. Raptors included a smart female Hen Harrier *Circus cyaneus* flushed from an area of rough grass and brief sightings of a marauding adult Peregrine *Falco peregrinus*. The passerine highlight was a migrant Hawfinch *Coccothraustes coccothraustes* in a garden at Pierowall, although two separate Snow Buntings *Petrophenax nivalis* came a close second. The only other passerine migrants seen were a Chiffchaff *Phylloscopos collybita* hopping about on a beach at Aikerness, and a handful of hirundines.

21 May 2013

Weather: NW3–4; cloudy then sunny spells with a few showers.
With a steady northwest wind forecast, and news of a good skua passage off the Outer Hebrides yesterday (209 Long-tailed and 110 Pomarine *Stercorarius longicaudus* and *S. pomarinus* passed North Uist), the objective for the day was sea-watching from Noup Head. However, the walk north took longer than expected due to the finding of a stunning male Red-backed Shrike *Lanius collurio* by the road at Noltland. This coincided with a major influx along the northeast coast of the UK - up to 12 on Holy Island, Northumberland and four on Fair Isle the same day.

The subsequent sea-watch at Noup Head from 1030–1800 provided the first real opportunity to test the theory that this location should deliver results in a northwest wind. It certainly did deliver, with 153 Long-tailed Skuas, three Pomarine Skuas, 13 Long-tailed Ducks *Clangula hyemalis*, five Manx Shearwaters *Puffinus puffinus* and a Red-throated Diver noted moving north amongst commoner seabirds. There were also four sightings of at least one Minke Whale (including some close views) and two sightings of a pair of Risso's Dolphins *Grampus griseus*. The Long-tailed Skuas moved through in flocks of up to 25, mostly distant but with a few at one-mile range. The movement was picked up elsewhere, with 68 Long-tailed and 13 Pomarine Skuas passing Wats Ness, Shetland, up to noon, and 147 Long-tailed Skuas and 17 Pomarine Skuas from the Outer Hebrides. As well as the migratory seabirds, there was also a persistent feeding flock of Kittiwakes *Rissa tridactyla*, Arctic Terns and auks along a tidal-topographic front a few hundred metres off the headland, which also attracted the attentions of the Minke Whale.

23 May 2013

Weather: NNW6–7; windy and cold with blustery showers and sunny spells developing.
The northwest wind was again gusting to 45 mph in the morning, and with conditions similar to the previous two days another seven and a half hours of sea-watching was undertaken (1000–1730). An incredible movement of at least 1,450 Long-tailed Skuas had passed North Uist the previous afternoon, suggesting there should be plenty passing Westray today. The results were indeed spectacular, with a total of 542 Long-tailed Skuas and 26 Pomarine Skuas recorded moving north off Noup Head (this is a new record count of Long-tailed Skuas for the Northern Isles). The hourly totals from 1000 were 68, 72, 67, 169, 104, 28, 29, 10, with the peak passage in the early afternoon including a long loose flock of 91 birds. The strength of the wind and the more northerly component ensured that many birds took a closer line than in the previous two days, allowing some record shots to be obtained (Plate 48).

The strong headwind encouraged an unprecedented overland skua movement further south in mainland Scotland, with 1,084 Long-tailed and 19 Pomarine Skuas moving through Corran Narrows apparently heading for the Great Glen. There were also widespread reports of smaller numbers of both species at sites all across northern Scotland, but peak counts elsewhere on Orkney were an order of magnitude lower

Plate 48. A flock of 14 Long-tailed Skuas.

than the Noup Head total, e.g. 45 at North Ronaldsay and 46 off Brough of Birsay around midday. Also seen moving north off Noup Head were ten Manx Shearwaters and at least one European Storm-petrel *Hydrobates pelagicus*, with up to five Harbour Porpoises offshore. The wintry feel was emphasised by the presence of an Iceland Gull *Larus glaucoides* in fields on Noup Head, seen well enough to age as a second-year bird, and two Snow Buntings (including one confident individual that posed well for photos while feeding in a sheltered burn).

26 May 2013

Weather: W3–N1, then E3–4; sunny and warm with light cloud; cooler and breezier later.
Another day of superb weather, and the switch in wind direction produced some great birds on my last full day in the field on the 2013 expedition. However, the first scarcity of the day was found while I was still in bed! At 0700 I awoke to hear a whistled repetitive "*pleased to meet you*" coming through the open window of my room. I quickly came to my senses as I realised it was a male Common Rosefinch *Carpodacus erythrinus*, but by the time I had thrown on some clothes and dashed outside it had disappeared. Nevertheless, this encounter changed the course of the day, as after breakfast I delayed my planned walk up to Noup Head and searched the gardens of Pierowall in the hope of relocating the elusive finch. Although unsuccessful, the search route took me across the golf course west of the village where at 1100 I discovered a superb Woodchat Shrike *Lanius senator* perched on a barbed wire fence. This was a new UK self-found bird for me, but better still, it wasn't showing any white at the base of the primaries suggesting it was a bird of the distinctive Balearic race *badius*. I rattled off a series of images as the bird gorged itself on bumblebees and other insects (it stored several of the bees on barbed wire larders), and then made a quick dash back to the hotel to double-check the key features and put the news out.

This done, I returned to the site to settle down and enjoy some great views of what was the first Balearic Woodchat Shrike for Scotland and only the tenth record for the UK (Fig. 5). A southern overshoot was certainly not what I was expecting from the trip, especially one whose home range was 2000 km to the south.

Plate 49. A flight shot of a Balearic Woodchat Shrike.

After lunch I quickly headed up to Noup Head in search of other arrivals, but drew a disappointing blank. However, while slogging back over the hills towards Pierowall, a distant scope scan of Loch of Burness from the adjacent hillside revealed a potential Red-backed Shrike on a fenceline bordering the southwest loch shore. It was a bit too distant to confirm with my 30x scope lens, so I was faced with a long trudge along the tarmac road running along the western loch shore to make sure of the identification. I should add that at this point the daily routine of 10 or so hours trekking across the island carrying several kilos of birding kit had started to impact on my physical condition and, rather like a marathon runner crossing the finishing line, the finding of the Balearic Woodchat Shrike and the prospect of heading home tomorrow had reduced me to a somewhat debilitated state. Nevertheless, I maintained my discipline and limped on a further kilometre or so until I got good enough views to confirm the second male Red-backed Shrike of the trip, just a few hundred metres from the Woodchat. My efforts were also rewarded with good scope views of a singing Corncrake *Crex crex*, and my first Whinchat *Saxicola rubetra* of the trip. That sorted, I then hobbled along to the golf course to have a final look at the Balearic Woodchat Shrike, joined by a couple of islanders. It was present up to 2000, but in an increasing southeast breeze and clear skies I suspected it would be gone by the morning.

23 May 2014

Weather: NNW–N5–6; cool, murky and breezy with sporadic drizzle all day.

A quick march up to Noup Head for a sea-watch from 0700–1200 produced four Long-tailed Skuas, four pale-phase Pomarine Skuas and five Arctic Skuas *Stercorarius parasiticus* moving north into a stiff headwind, as well as at least one European Storm-petrel, nine Manx Shearwaters and at least six Harbour Porpoises. A survey for Bridled Guillemots *Uri aalge* at Noup Head saw counts of 92 from 662 birds (13.9%, Russell Wynn) and 103 from 858 birds (12.0%, Andrew Colenutt) in roughly the same sections of the colony. In the North Bis Geo area a marauding immature Peregrine flushed a Black-tailed Godwit from nearby fields, and four newly fledged Ravens *Corvus corax* terrorised the local Fulmars *Fulmarus glacialis*. The highlight of the day was rather unexpected given the conditions: a presumed immature male Common Rosefinch feeding on dandelion seeds on a roadside verge near Bis-Geos at 1600, before it flew to fields to the northwest at 1615. Finally, on Loch of Burness the male and female Scaup, and drake Long-tailed Duck, all remained, and a single Whimbrel *Numenius phaeopus* was noted.

28 September 2015

Weather: S2–SSW4; mild with light cloud and increasing sunny spells.

Although migrant numbers remained low, there was plenty of variety and a trio of scarcities to keep things interesting. The first was a calling Richard's Pipit *Anthus richardi* that arrived from the north at Pierowall at 0930, landed briefly, and then continued eastwards about five minutes later. The second was a smart first-winter male Bluethroat *Luscinia svecica* on the south side of Bay of Cleat at lunchtime, and the third was an overdue Yellow-browed Warbler *Phylloscopos inornatus* found late afternoon in a tiny strip of roses at Kirkbrae. The only other small migrants were four Lesser Redpolls *Carduelis cabaret*, two Redwings *Turdus iliacus*, a Robin *Erithacus rubecula* and a Chaffinch *Fringilla coelebs* at Pierowall, plus a Chaffinch and two Wheatears *Oenanthe oenanthe* at Piggarth. Raptors were represented by two Hen Harriers (a male and a ringtail) at Loch Saintear, an immature female Peregrine over Pierowall, and a femal/immature Merlin *Falco columbarius* at Loch of Swartmill. The latter site held over 450 Wigeon *Anas penelope* and several tens of Teal *Anas crecca*, as well as seven Ruff *Philomachus pugnax*, nine Pintail *Anas acuta* and 11 Whooper Swans *Cygnus cygnus*. Other waterbirds included a drake Shoveler *Anus clypeatra* at Gretna Green, a Ruff at Piggarth, 27 Teal and over 80 Snipe *Gallinago gallinago* at Bay of Brough, and two Grey Herons *Ardea cinerea*, 65 Bar-tailed Godwits and 94 Wigeon at Loch Saintear. Finally, just one Slavonian Grebe *Podiceps auritus* remained off Pierowall, and at least two Water Rails *Rallus aquaticus* called from the iris beds there.

5 October 2015

Weather: SE5–7; windy, with light rain at dawn clearing to cloud and sunny spells.

At last the wind swung into the southeast quarter, and with some early morning rain and cloud hopes were high. However, the initial signs at Pierowall were not at all promising, with the regular ringtail Hen Harrier and a Robin being the only notable birds located in difficult viewing conditions. Loch of Burness was not much better with just seven Pink-footed Geese *Anser brachyrhynchus* and six Grey Herons sheltering from the stiff wind. The first indication for a fall came at Hilldavale, where at least 50 Redwings and 35 Blackbirds *Turdus merula* were counted, and many appeared to be arriving from the west cliffs. A single Lesser/Common Redpoll also flew over there. Noup Farm saw more thrushes arriving, but otherwise just the lingering juvenile Turtle Dove *Streptopelia turtur*, a Kestrel *Falco tinnunculus*, and a grounded Pink-footed Goose *Anser brachyrhynchus* were seen there. The first indications for a serious fall came when the slightly sheltered north cliffs of Noup Head were reached. A Ruff, two Yellow-browed Warblers and two Grey Herons were quickly found, and marked the start of a chaotic, challenging, nerve-wracking, but massively enjoyable afternoon. The area around the lighthouse at Noup Head was alive with birds, with Redwings erupting from underfoot in the smallest patches of shelter. At least 150 were recorded, but there were probably many more, as well as a couple each of Song Thrush *Turdus philomenos*, Brambling *Fringilla montifringilla* and Chaffinch mixed in. Four Yellow-browed Warblers, two Goldcrests *Regulus regulus* and six Wheatears were zipping around the lighthouse complex and adjacent clifftop. Many of the Redwings were sheltering on tiny ledges on the west cliffs, and while scanning this area a Pied Flycatcher *Ficedula hypoleucha* was spotted, enjoying the mid-afternoon sunshine. At one point (while being phone-scoped) this bird clearly became agitated, with much flicking of wings and tail; the reason was a smart first-winter male Bluethroat *Lasvinia svevica*, which suddenly emerged from a hidden crevice, flicked its wings and tail in reply, and disappeared back into the crevice never to be seen again. Subsequent checking of the south cliffs produced a settled first-winter Red-breasted Flycatcher *Ficedula parva* in Ramni Geo, while a Greenshank remained nearby on Loch of the Stack and a flock of 55 Snow Buntings fed on the

adjacent slopes. A Buzzard *Buteo buteo* suddenly appeared and toured the headland before heading back southeast (although it was seen late afternoon at nearby Monivey carrying a prey item). On the northwest slope of North Hill yet more Redwings burst from scant cover and dispersed over the hillside, and while checking through them at 1530 another bird was picked up, showing bright orange flanks and what appeared to be a dark bluish tail. It had to be a Red-flanked Bluetail *Tarsiger cyanurus*, but the bird suddenly flew some way away before landing again and looking very flighty! A quick check with the scope nailed the identification, but obtaining a half-decent record shot was going to be extremely difficult. The bird was clearly wary, mobile and feeding between tussocks on an open grassy slope that was extremely windy and exposed. Moreover, the light was fading as low cloud rolled in. However, by getting upslope of the bird and slithering around in the grass and mud for an hour, some crucial images were obtained. Based on the amount of blue showing on the lower flanks, it was probably a first-winter male. At 1700 it disappeared over the cliff edge. That left just enough time for a quick check of North Bis Geo at dusk, which produced a single fem/imm Merlin, Goldfinch *Carduelis carduelis* and Chaffinch, but nothing else of note. So all in all a great day, but one can only wonder as to how many good birds were missed.

Plate 50. A smart Red-flanked Bluetail.

Summary

The three two-week expeditions in 2013–15 saw me spending an average of ten hours a day in the field, and showed the potential of Westray to deliver fantastic sea-watching and a wide variety of quality land bird migrants. The record Long-tailed Skua passage of 2013 formed the basis of a paper in British Birds, comparing the visual sightings data from across Scotland that spring with contemporaneous geolocator-based tracking undertaken by a Norwegian team. The Balearic Woodchat Shrike was accepted as a first for Scotland, and a full account was published in Scottish Birds. The list of additional self-found scarcities included Green-winged Teal *Anas carolinensis*, White-tailed Eagle *Haliaeetus albicilla*, Buff-breasted Sandpiper *Trygites subruficollis*, Barred Warbler *Sylvia nisoria*, and Lapland Bunting *Calcarius iapponicus*. The island holds breeding Corncrakes and spectacular seabird colonies, and is also a hub for incoming geese from the northwest in autumn. The UK wintering population of Pink-footed Geese is now at 350,000–400,000 individuals, and comprises some 90% of the global population. Data from Westray and North Ronaldsay on 25 and 30 September 2015 alone indicated that about 5000 birds passed over, equating to more than 1% of the global population. Needless to say, I plan to undertake further expeditions to this special corner of the British Isles in the coming years, so watch this space!

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Plate 51. Leaving Petropavlovsk.

Summertime birdwatching in the NW Pacific and Bering Sea

by Commander AY Norris
(*Photographs by N McCall*)

Published in 1956 and written by Roger Peterson and James Fisher, 'Wild America' remains for me the best account about the noble art of birdwatching, and the highlights when reading of that remarkable journey were the chapters about the Bering Sea and the shore line of far north western Alaska. Another book which brings home the essence of bird spotting and which introduced to me the joy of birds in distant places is 'A Bewilderment of Birds' by Colonel J K Stanford published in 1954. The effect of these two volumes of yesteryear persists.

Years later, I saw in a travel brochure a notice of a cruise in the *MV World Discoverer* entitled 'The Ring of Fire'. Starting in late May 2004 in Hokkaido, Japan, the programme was to cruise the Okhotsk coasts of the Kuril Islands and the east coast of the Kamchatka Peninsula along the eastern extremity of Siberia, the western groups of the Aleutians, the islands of the Bering Sea and the sub-Arctic approaches to the Bering Strait, ending in Nome, Alaska. This was the opportunity and I took it.

Geography

For many seamen, particularly those in the business of national defence, the far north west of the Pacific Ocean, the Sea of Okhotsk and the Bering Sea have been almost impossible to visit. Even during my trip and despite the end of the Cold War, the entrance to the port of Petropavlovsk on Avancha Bay remained mined, with access under the control of special pilots. Japanese coastal patrol craft and heavily armed Russian ships cruised the waters of the strait between Hokkaido and the southern extremity of the Kuril Islands, their sovereignty in dispute since WW2. Naturalists

with their binoculars, telescopes and cameras at the ready were regarded with interest by soldiers of the Russian base in Nikolskoje in the Commander Islands, and Russian observers appointed to the ship were noticeably uncomfortable about tourists steaming in the Sea of Okhotsk and going ashore. The only commercial vessels were fishing boats and a few steamers carrying supplies to small harbours.

Volcanoes abound in the region. Close to the south east coast of the Kamchatka peninsula there are 53 of which 16 have erupted since 1900. The neighbourhood of Petropavlovsk contains seven volcanoes, four said to be active. Spectacularly, Karimsky further north on Kamchatka erupted all day, the speed of its pyroclastic flows disturbing. During this trip, the volcanoes of eastern Hokkaido were active and the fumeroles of Kunashir in the Kurils were discharging in spectacular manner. On Yankicha, further along the Kurils, the steaming water, occasionally exploding from pools and with the stench of sulphur, seemed reminiscent of medieval representations of hell; nevertheless, some hot pools contained concentrations of red algae.

The seas contain the deepest of troughs. The Kuril Trench alongside the Kuril Islands and the east coast of Kamchatka almost defeats an echo sounder. The trench alongside the north of the west limit of the Aleutians drops to 2,100 fathoms with evidence of much upwelling under the summer gyre of the Bering Sea in the wider Aleutian Basin. Northwestwards, extending from the Fox Islands in the Aleutians, is a continental shelf which stretches across the Bering Sea to NE Siberia. Vast numbers of seabirds on nearby highlands and cliffs and feeding offshore suggested that ocean food oozed hereabouts at this time of year. The conditions of the far northern limit of the Pacific and the Bering Sea are described in great detail, particularly the movement of water, in Admiralty Pilot No 23, which like all 72 volumes is unparalleled in its quality and coverage.

Throughout almost all of this expedition the sky was cloudy and the sea calm. The sun made very few appearances and light rain occurred three times. Fog was experienced twice. Given the curious political orientation of the International Date Line at the western end of the Aleutians, recording the date during the passage needed care.

Plate 52. An example of a sommian - a volcano within a volcano - on Kunashir Island.

Figure 1. The ring of fire.

Some birds other than those of the sea

Birdwatching visitors to the northernmost Japanese islands will wish to visit the Kushiro Shitsugen National Park, Hokkaido. These wetlands are vast. It is here that numbers of the most spectacular Japanese or Red-crowned Cranes *Grus japonensis* breed. It was springtime, and the reed beds of this park were alive with warblers. Rubythroats *Luscinia calliope* in the willows, often at close range, were an especial joy to watch.

Further northwards, among the sallows and alder scrub of the former gulag for women on Atlasova, in the Kurils, about 20 very active Arctic Warblers *Phylloscopus borealis* were encountered calling, trilling and feeding in preparation for their breeding season.

Brought up with Peter Scott's 'Key to the Wildfowl of the World' of many years past, I was delighted to find his Falcated Teal *Anas falcate* - drakes with their long crests and even longer tertials - and also the Harlequin Duck *Histrionicus histrionicus*, which is found in small numbers along the coasts of the Kurils, Kamchatka and northwards to Alaska.

The best sightings of birds of prey occurred along the coast of Kamchatka where several majestic Steller's Sea Eagles *Haliaeetus pelagicus* were encountered. Ashore, I came across an immense, bulky nest in a riverside Ermin's Birch, together with a sitting bird, and the whole edifice looked far too big for the tree to withstand. We saw White-tailed Sea Eagles *H. albicilla* too; they looked quite ordinary by comparison.

Plate 53. Harlequin Duck.

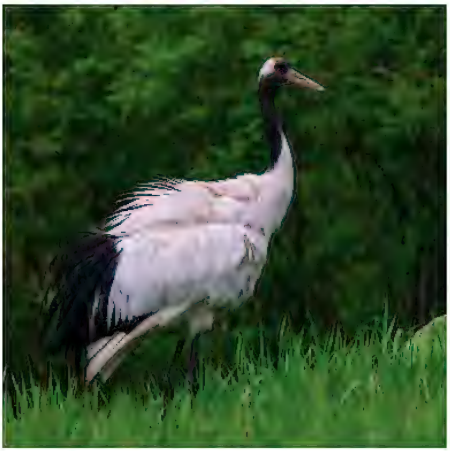

Plate 54. Red-crowned Crane.

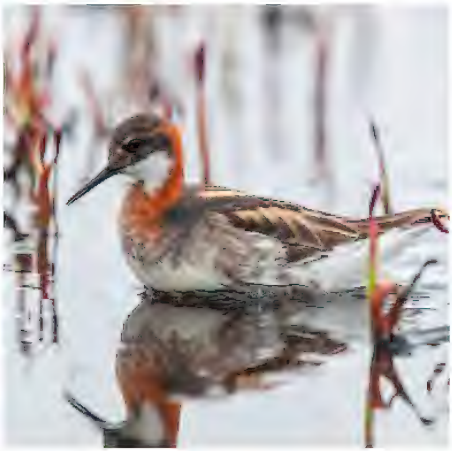

Plate 55. Red-necked Phalarope.

Plate 56. McKay's Bunting.

Seabirds

Five species of divers were encountered, all in coastal waters; the White-billed *Gavia adamsii* along the Kurils, the Great Northern Diver *G. immer* in Safety Sound, Alaska, several Blackthroated *G. arctica* in the Kurils, and the Pacific *Gavia pacifica* in the Kurils, in Kamchatka and in Safety Sound. The views of over fifty Red-throated Divers *G. stellata* together in Chazma Bay, Kamchatka were unforgettable.

A Great Crested Grebe *Podiceps cristatus* off Iturup in the Kurils and a couple of Red-necked Grebes *Podiceps grisegena* at Chirpoy further north were the only grebes seen at sea.

Laysan Albatrosses *Diomedea immutabilis* were noted from Hokkaido to sub-Arctic waters on nine days, and the evening view on 12 June of about a thousand of these birds settled and feeding over the area of up-welling in the southern limit of the Aleutian Basin was remarkable. Two of the rare but increasing Short-tailed Albatross *Diomedea albatrus* were noted in this area, settled on the water and feeding among the Laysans.

Northern Fulmars *Fulmarus glacialis* were seen daily, often in large numbers. On the precipitous island of Broutona, in the Kurils, Russian biologists estimated a breeding population of a million birds, their noise appealing, their smell not. All were dark phase until we reached the approaches to Avancha Bay, Kamchatka, after which the incidence of pale phase birds increased.

On 12 June and approaching the island of Attu in the Near Islands, Aleutians, three Mottled Petrels *Pterodroma inexpectata* were encountered and the following day five more were noted. Decades ago and in the vicinity of New Zealand, these gadfly birds were known as Peale's Petrel.

Except for a group of fifty birds off Kunishir, in the Kurils, Sooty Shearwaters *Puffinus griseus* were seldom seen and then only as individuals.

Another special 'tubenose' event occurred on 3 June off the Pacific coast of Kunishir when thousands of Short-tailed Shearwaters *P. tenuirostris*, breeders from southern Australia, flew past in vast flocks for about an hour, heading northwards. The following day hundreds were found off the Chernye Bratye Islands in the Sea of Okhotsk. Short-tailed Shearwaters were encountered on a further five days including over 500 in the Bering Sea on 14 June.

Fork-tailed Storm-petrels *Oceanodroma furcata* were often common, particularly in the NW Pacific. Some 200 were observed feeding over the up-welling waters among the albatrosses. Leach's Storm-petrels *O. leucorhoa* occurred on two days over the waters of the Sea of Okhotsk and the NW Pacific.

Great Cormorants *Phalacrocorax carbo* were present in the waters of Hokkaido. A small group of Japanese or Temminck's Cormorants *P. capillatus* was found nesting on cliffs on Iturup. Pelagic Cormorant *P. pelagicus* were found on five days around the Kurils and as far north as St Lawrence. Seven to eight thousand Red-faced Cormorants *P. urile* were seen to be breeding on the cliffs of the Kamen An Islands off Bering island on 8 June; they were seen on a further five days, the last being 200 on Kiska, one of the Rat Islands in the Aleutians.

Plate 57. Tufted Puffin.

Plate 58. Least Auklets.

Plate 59. Parakeet Auklets.

Plate 60. Red-legged Kittiwake.

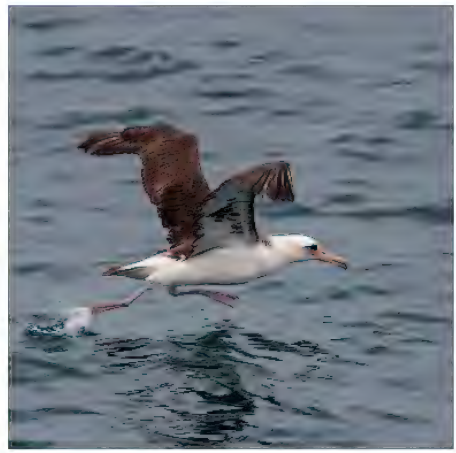

Plate 61. Laysan Albatross.

Plate 62. Red-faced Cormorants.

To see phalaropes in breeding plumage settled on the sea in groups must be one of the joys for a maritime birdwatcher. Thus it was for me to see, on 7 June, a raft of 26 Grey (Red) Phalaropes *Phalaropus fulicarius* in the seaward approaches to Avancha Bay, Kamchatka, and a further two in Chazma Bay. Red-necks *P. lobatus* were seen on five days; a raft of 25 on 3 June off Kunishir was a lovely sighting as were eleven together off the shoreline of Nome, Alaska.

Given the time of year, it was to be expected that Pomarine Skuas *Stercorarius pomarinus* would be encountered well to the north and six were found around St Lawrence Island. It was curious that Arctic Skuas *Stercorarius parasiticus* were seen on just three days as were the Long-tailed variety *S. longicaudus*, and all well to the north.

Nine species of gull were noted during this cruise, and a further two were claimed by representatives of the 'Community of Splitters and Designer Ornithologists' - a so-called 'Mew' gull of the Common Gull species and formerly the North American race, and the 'Vega' of the Herring Gull outfit. The most frequently seen species of gull was the large Slaty-backed *Larus schistisagus* which was encountered from Hokkaido northwards to the limit of the Pacific, often in hundreds. Next came the Black-headed Gull *L. ridibundus,* and after years of counting these noisy, smelly birds at Titchfield Haven, Hampshire, coming across numbers of them at Chazma and Zhupanova Bays on the Kamchatka peninsula was a bit of a surprise. As the ship moved northwards, arctic-associated gulls were expected and Glaucous-winged *L. glaucescens* and finally Glaucous Gulls *L. hyperboreus* were found in large numbers, marauding breeding cliffs. As it was early in the arctic breeding season, neither Sabine's *L. sabini* nor Ross's Gulls *Rhodostethia rosea* was expected and this proved to be the case. Bonaparte's *L. philadelphia* were found over fresh water near Anchorage.

Perhaps the most puzzling aspect of this expedition was the occurrence on 19 June of three Western Gulls *L. occidentalis* along the beach of the coastline to the east of Nome. This large, dark-backed species is considered by Harrison in his book to be restricted to the west coast of the United States and British Columbia, at least 1400 nm to the SE, and his map of distribution supports this. Our Nome birds had dark grey saddles and wing surfaces and the distinctive pattern of white markings at the tips of the outer primaries illustrated clearly by Harrison. The birding fraternity on board puzzled long and hard before arriving at a conclusion.

Of all oceanic birds in northern waters, clamorous kittiwakes are among the most engaging of seabirds, whether they are in the roughest of weather over the ocean or nesting on excreta-stained bridges over the River Tyne. The Black-legged species *Rissa tridactyla* occurred, often in thousands, from the Kuril islands, along the coast of Kamchatka, around the Aleutians and up to the sub-Arctic below the Bering Strait. Espied on three days, the slightly smaller, darker-backed Red-legged Kittiwake *R. brevirostris,* with noticeably shorter legs, was present in numbers up to 150 around the islands of the Bering Sea. This bird is as much a pleasure to see as the Black-legged, especially when numbers of both were seen together, as they were on the cliffs of St George in the Pribilofs.

Four species of tern were seen but they were infrequent birds. Small numbers of Common Tern *Sterna hirundo* with black bills and legs (race *longipenni*) were encountered alongside the Kurils and in the bays of Kamchatka, while Little Terns *S. albifrons* occurred off Honshu, Japan, and Arctic Terns *S. paradisaea* showed up

off Nome. To come upon the Aleutian Tern *S. aleutica* in breeding plumage with its very long tail streamers is to see a gem of a seabird. They occurred as individuals in the bays of Kamchatka and in Norton Sound, Alaska.

We were told in the cruise publicity that we could expect to see sixteen species of auks, and most showed themselves. Vast numbers - probably millions - of Crested Auklets *Aethia cristatella* and Least Auklet *A. pusilla*, were gathered near their breeding areas, and several others including the Tufted Puffin *Fratercula cirrhata*, were present in their thousands. The Black Guillemot *Cepphus grille* is vaguely extralimital on the northern approaches to the Bering Strait in the Arctic while the Crested Murrelet *Synthliboramphus wumisuzumi* is extralimital to the coasts of Japan. Neither was encountered. Wherever there were sea cliffs or steep mountain sides by the sea, auks were seen to be breeding. Assessing numbers of the different auk species was difficult. Twice I just lost count and recorded 'multitudes' - numbers were so many that I had no idea whether I was looking at hundreds of thousands or millions.

At daylight on 13 June the ship arrived off Sirius Point, Kiska in the Rat Islands of the Aleutians. This headland was the seaward end of a series of enormous basaltic cliffs which disappeared upwards into cloud but which we knew were part of the outside of the rim of the Kiska Volcano. In the distance and approaching from westwards, I saw what looked like the dirty exhaust from an ancient steamer, streaming down to the sea from the clouds above the point. As we got closer, I saw that the effect was caused by the continuous movement of countless auks, Crested and the tiny Least Auklets. Not only was the surface of the sea carpeted with birds but the downdraught of a multitude of others continuing from the cliffs and the base of the clouds seemed endless. Standing in the bows of the ship as it was being driven through these masses of seabirds in flight and on the water was an extraordinary experience. Once or twice the concentration of birds was such that one could not see the water surface except very close to the ship's bow, and visibility at eye level towards the point was hugely affected by the extraordinary down-draught of birds. Early in the morning of 17 June the ship stopped off Tatik Point at the southwest of St Lawrence Island. Again, multitudes of Crested and Least Auklets were seen pouring through the cloud close to the icy cliffs. Other species present included Common Guillemots *Uria aalge*, Brunnich's *U. lomvia* and Pigeon Guillemot *Cepphus columba*, Parakeet Auklets *Cyclorrhynchus psittcula*, Horned *Fratercula corniculata* and Tufted *F. cirrhata* Puffins - plus a single Little Auk *Alle alle*. The birding fraternity in the ship came to the conclusion that the St Lawrence display was even greater than that off Kiska.

Mammals

Nine cetacean species including six of whales were seen. We spent one afternoon stopped in the Strait of Yekateriny in the Kurils in calm conditions, surrounded by 48 Orcas, grouped in sub-pods of five to seven. Later we spent an evening in the shallow waters of Norton Sound , Alaska, and saw 24 well-spaced Sperm Whales resting on the surface above the summer gyre, occasionally being 'spy-hopped' by a Grey Whale. Dall's Porpoises also caught our attention - they ought to be called 'Spray Porpoises' for the effects of the speed at which they move at the surface - and pods were always spectacular to watch as they approached the ship. Northern Fur Seals, Steller's Sea Lions and two species of seal were often seen as were Sea Otters along Russian coastlines. Walking ashore in the woodlands and on the beaches of Kamchatka needed much care, for individuals of the local race of Brown Bear were common. Land mammals which I did not expect to see but which provided lengthy and splendid views were 21 Musk-ox on the tundra well to the east of Nome, a Moose arriving to join them for a while.

Plate 63. Killer Whales.

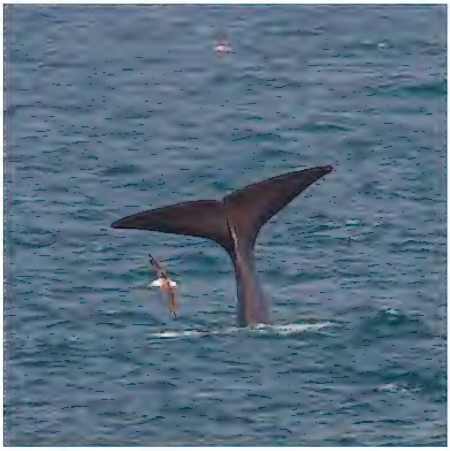

Plate 64. Albatross and whale.

Plate 65. Sea Otters.

Plate 66. Steller's Sea Lions.

Plate 67. Horned Puffins.

Conclusion

This cruise fulfilled all the hopes and expectations that arose from reading those two books years ago. Fifty-five species of seabird were recorded, and most in large numbers. What a very special region the far NW Pacific and Bering Sea is in the northern summer months!

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Plate 68. Fea's Petrel.

More life on the ocean wave - Madeira

by Major Peter Carr, RM
(*Photographs by the author*)

The first week of September 2015 found me in Madeira with a big grin on my face. The journey to "the best pelagic in the Western Palearctic" had taken over thirty years to come to fruition. Its outcome could not have been sweeter and it demonstrated admirably the benefits of Service life and, in my case, the advantages of belonging to the RNBWS.

Some 30 years ago, as a young and naïve Corporal Royal Marines, sitting in dry dock in Portsmouth on board HMS Gloucester I was staring at a map of the oceans. I was gazing at the names of islands in the Atlantic and dreaming of what it must be like to visit these seabird havens in far flung places. Names such as Ascension, Cape Verde and Gough conjured up images of tumultuous waves crashing onto dramatic cliffs that towered up from the ocean floor while all around seabirds planed past the breeding ledges, the air filled with skirling cries of ocean wanderers.

I noticed a group of islands I had never heard of before. Lying almost midway between the Canary Islands and Madeira were the intriguingly named Portuguese-owned Savage Islands (Ilhas Selvagens). They looked hilly, they were isolated and surely must have thousands of breeding seabirds. Indeed, they looked the perfect destination for an adventurous Royal Marine NCO seeking to lead a scientific expedition to reveal to the world the islands' ornithological wealth.

So, enthused by my grandiose idea, and mindful of the great Royal Navy tradition of exploration, I sent a letter to the Admiralty informing Their Lordships of my intentions to explore this island group on their behalf. It was with genuine surprise and great disappointment that some weeks later I received a reply thanking me for my enthusiasm but telling me that my services on this occasion were not required, because a scientist named Mr Alec Zino was already conducting seabird research in this area.

Deflated but not defeated I set my heart on one day visiting some of these Atlantic islands, and even, who knows, get to meet Mr Zino.

Fast forward 30 years to the 21st century. The distinguished seabird specialist Hadoram Shirihai had spent time on Madeira researching seabirds and had trained two locals, Catarina Correia-Fagundes and Hugo Romano, in the art of chumming and locating seabirds at sea. These two excellent guides formed Wind Birds, (www.madeirawindbirds.com), a company that organises wildlife/bird tours on Madeira, specialising in pelagics, and for seabird fanatics the undoubted highlight and crowd-puller is their Zino's Petrel Pelagic Expedition.

The history of Zino's Petrel *Pterodroma madeira*, which breeds only in the mountainous interior of the island of Madeira, is remarkable, a testimony to one family's dedication to conservation and scientific research and, sadly, also a testimony to man's devastating impact on breeding seabirds on oceanic islands. Following a similar pattern of other members of the ocean-wandering *Pterodroma* petrel family such as the Cahow *Pterodroma cahow* of Bermuda, the Magenta Petrel *Pterodroma magentae* and the Chatham Island Petrel *Pterodroma axillaris*, the arrival of man and other predators on Madeira resulted in the near extinction of Zino's Petrel, and it has only been through the intervention of some dedicated individuals and organisations that these species remain in existence. In the case of Zino's Petrel it has been the dedicated research and proactive conservation measures on Madeira, primarily led by the Zino family, that have enabled this rare and enigmatic species to retain a breeding toehold in the wild and rugged mountain tops of the island.

For the uninitiated, a very brief taxonomic diversion into one small region of the global distribution of this understudied and complex family is necessary. Around Madeira there are two species of Pterodroma that breed and are most likely to be seen on a pelagic outing in the breeding season. These are Zino's Petrel, *Pterodroma madeira* and Fea's Petrel *Pterodroma feae*.

The definitive story of Zino's Petrel can be found in the 1986 "Contribution to the study of Petrels of the genus Pterodroma in the archipelago of Madeira" by Alec Zino and his son Frank. Zino's Petrel is monotypic. On 18 July 1903, Padre Ernesto Schmitz, the head of the Seminary in Funchal and a dedicated naturalist, had four live Pterodromas brought to him from the mountains between Santo Antonio and Curral, on Madeira. He published this finding in 1905, but thought the birds were *Oestrelata feae, Salv.*, now known as *Pterodroma feae*, which he knew from Bugio Island, in the nearby Desertas Islands. Only in 1934 did Mathews suggest that the Bugio and Madeira birds were different, and were subspecies of *Pterodroma mollis mollis*. On 5 October 1940 Jerry Maul from the Municipal Museum of Funchal, known now as the Natural History Museum of Funchal, had a specimen brought to him from the seafront by the Governor's Palace. Then, on 6 October 1951, a second bird was found in Ribeira de Santa Luzia on the outskirts of Funchal, and this was the last individual of this species seen for 18 years. In the sixties, Alec Zino made several attempts to find

some evidence of the species, having made many expeditions to Bugio Island to work with Fea's Petrel. It was only at the end of that decade that he managed to rediscover it, by playing recordings of the calls of the Bugio Island Pterodromas to shepherds in the region of Madeira where he knew the Schmitz birds were collected in 1903. Alec had reasoned that if somebody of Schmitz' experience could misidentify the birds because they were so similar, then maybe their calls were also similar.

One shepherd by the name of Lucas recognised the calls and indicated where they had been heard. This led to the rediscovery of Zino's Petrel, hitherto considered probably extinct, on 16 June 1969. Later, in 1986, it was discovered that several eggs and young birds showed signs of predation, and that not a single juvenile survived to fledging. A conservation programme was then begun on Madeira to reduce and control the main predators of the species, rats and (from 1992) cats. Zino's Petrel is classified as Endangered by the IUCN Red List and has an estimated global population of 65–80 breeding pairs. (http://www.birdlife.org/datazone/speciesfactsheet.php?id=3906 accessed 29 December 2015).

The Near-Threatened Fea's Petrel has a global population thought to be about 3,000 pairs (Flood & Fisher 2013) and is considered polytypic and to be comprised of two species or subspecies, depending upon the taxonomy followed. The population breeding in the Cape Verdes (Cape Verde Petrel) have the name *Pterodroma. (f). feae* and the population breeding on Desertas islands (Desertas Petrel) *Pterodroma. (f). desertae*. (For further discussion see for example Shirihai, Bretagnolle & Zino 2010; Flood & Fisher 2013).

With respect to the separation of Fea's from Zino's, even with a bird in hand it is not always easy, though Fea's from Bugio weigh some 50% more than Zino's and certainly have a much more robust bill. At sea from a moving boat looking at a moving bird the problem is much more complex, but is well illustrated in the 2010 paper by Shirihai *et al.* with many photos.

Armed with all the above information I booked three days at sea with Catarina and Hugo at Wind Birds after having been expertly guided by them on an earlier tour to sites on land to see the three endemic Madeira land birds. Mid-afternoon on 2

Plate 69. Zino's Petrel

September 2015 the oceanic 11 metre RIB *Oceanodroma* pulled out of the small port of Machico for an eight-hour stint of pelagic birding. This was day one of the three-day Zino's Petrel Pelagic Expedition.

Day one brought very light winds, few foraging oceanic seabirds, and not much excitement. It did however enable us to familiarise ourselves with the bread and butter species of Cory's Shearwater *Calonectris diomedea borealis* and two familiar friends from the Chagos Archipelago, Bulwer's Petrel *Bulweria bulwerii* and Wilson's Storm-petrel *Oceanites oceanicus*. Day two was more productive, with in addition to the birds of the day before a single Great Shearwater *Puffinus gravis* and four Manx Shearwater *P. puffinus,* plus five confirmed Fea's and a possible Zino's. Everything now rested on the final day of the final Wind Bird pelagic expedition of the year.

This proved to be one of those unforgettable days at sea when the birds just kept on coming, and what is more I was accompanied by Dr Frank Zino, son of Alec, who more than any other person alive is responsible for the continued survival of Zino's Petrel. All of the trip's previous seabirds appeared, but in greater numbers, and we also were able to see and identify Sooty Shearwater *P. griseus*, European *Hydrobates pelagicus* and Madeiran Storm-petrel *Oceanodroma castro* plus assorted gulls, terns and a Pomarine Skua *Stercorarius pomarinus*. But it was the *Pterodromas* we had come to see and the grand finale of the expedition for me was whilst photographing an extremely obliging Fea's Petrel off the port side, and being told by Frank Zino to turn around and see what was showing well behind me. And there it was, a Zino's Petrel, close enough to photograph and see (well, actually have pointed out) the salient identification features.

Three days on the ocean with some terrific birds viewed and a day spent in the company of Frank Zino; could it get better? Well, yes it did, for Frank next night took me to the nesting ledges of the Madeira Petrel high in the mountains in the centre of Madeira, and yes, we did manage to capture a ringed Zino's Petrel - Plate 109 on the back cover of this issue says it all.

This Madeira trip brought home to me the joy of birding and of belonging to the RNBWS, and for me was not just a three-day expedition, but a journey of over 30 years. True, I didn't manage to get to the Selvagen Islands this time but there's still time for them.

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Plate 70. Sand Martin.

Last days at sea

by CPO Mark Cutts
(*Photographs by the author*)

In September 2015 HMS *Richmond* sailed from Bahrain and began a two week passage to Goa. These two weeks were to be my last at sea in the Royal Navy and with my relief on board I hoped to have time to enjoy the upper deck and any birds that might land. It took me back to my first birding experience at sea, in October 1991, in the very same waters. The ship then was HMS *Hermione*, and I was on the flight deck with my binoculars when a small bird crashed down in front of me. It was obviously unwell for it let me approach and pick it up. I identified it as a Sand Martin *Riparia riparia* and after giving it a couple of hours of rest in a box I carefully placed it out of the wind high up on the superstructure and as I headed back down the ladder, I turned and took a photo just before it flew off.

Now it was 2015, and I knew there was a good chance I would see some interesting birds, for the autumn migration was well under way. Even so, my first sighting was rather unexpected for as I walked onto the flight deck on day two a Purple Heron *Ardea purpurea* alighted on the nets, while beyond were seven more flying parallel to the ship. After a while the bird took flight and joined the others and the little squadron slowly peeled away.

Being a birder on board ship is seen by most sailors to be a rather way out hobby, but after a while most of the crew are keen to let you know when something interesting lands on board. Thus it was on day three when I was stopped and told that a bird with blue wings was on the foc'sle. I quickly grabbed my camera and came upon a superb Indian Roller *Coracias beneghalensis*, a species we were to see quite a lot in the ensuing days. Another frequent visitor was Laughing Dove *Streptopelia senegalensis*. The most I saw together was six but singles were often seen sitting on the gun or around the guard rails.

Plate 71. Purple Heron.

Plate 72. Indian Roller.

Plate 73. Hoopoe.

A Stonechat *Saxicola torquata* in the waist and a Eurasian Collared Dove *Streptopelia decaocto* were the next two visitors, and a few days later I was told of a bird of prey in the hangar. My mind raced with possibilities but when I got there I realised that it was just a Common Kestrel *Falco tinnunculus*, though no less thrilling for all that.

We were now nearing Indian waters and my time at sea was drawing to a close. My next sighting was a species that any regular watcher of land birds at sea would be very familiar with - a Hoopoe *Upupa epops*, a fantastic looking bird and one that is easily recognised. These are regular visitors to ships in the Mediterranean, the Red Sea and the Arabian Gulf.

This brings me to the day before we entered Goa Port and my last day at sea. I had just finished playing deck hockey when a shout went up and I heard my name as a small bird skimmed low before us, swooped up and landed on the hangar roof. The hangar roof was of course a rather unhealthy place for viewing birds because it was near some powerful transmitter aerials, but I crept around the edge trying to see if anything was in view from the deck below. Sure enough there was a bird on the edge and I quickly recognised it as the same species I had seen 24 years earlier - a Sand Martin.

Plate 74. Sand Martin.

That was my last sighting and rather fitting I like to think. To say I will miss birding at sea would be an understatement: the thrill of walking out onto the upper deck early in the morning, not knowing what might be there. Most of the time of course there is nothing, but every now and then something catches the eye - a Yellow Wagtail *Motacilla flava* dashing from under the gun or a Sanderling *Calidris alba* drinking from a puddle on the flight deck. Birding at sea is a hobby I thoroughly recommend to any seafarer and it is certainly one that has brought me years of pleasure.

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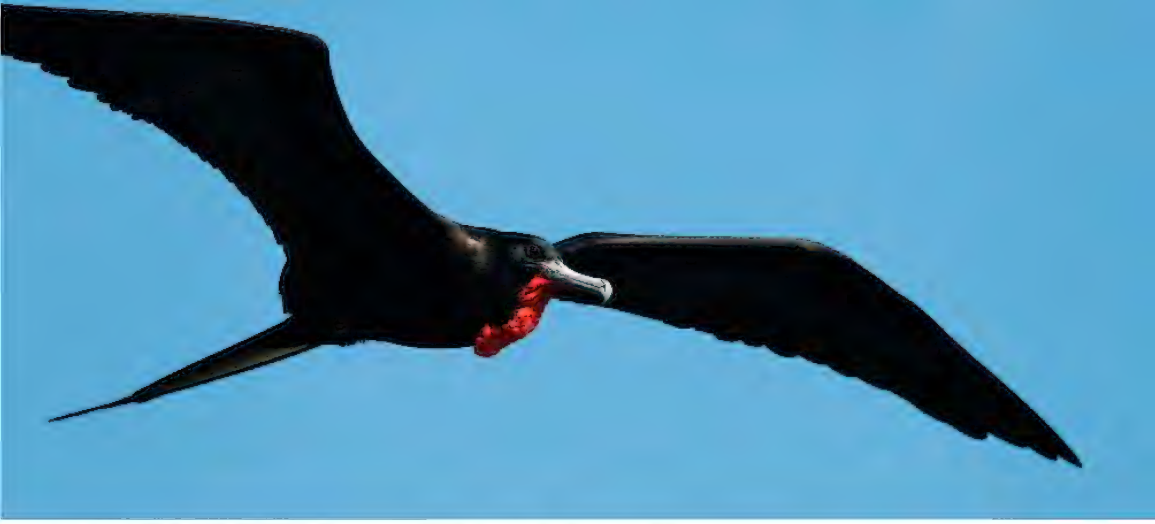


Plate 75. Male Great Frigatebird.

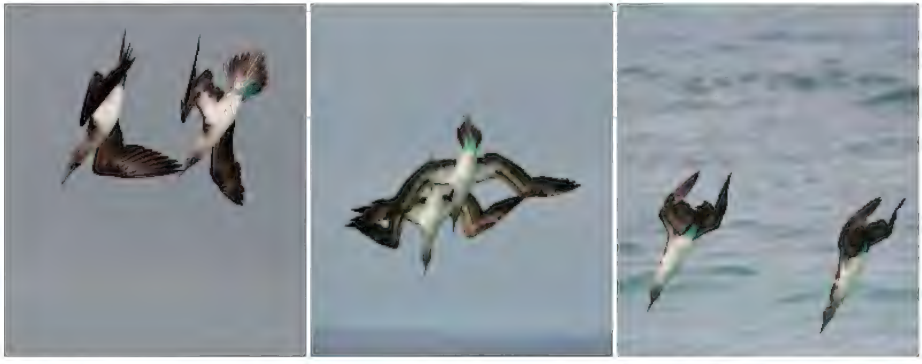
Cruising aboard the *Athala 2* in the Galapagos

by Tim & Jane Barton

(*Photographs by Jane Barton*)

In the last week of April 2016 we spent seven days cruising around the Galapagos Islands. The island you visit and the length of time ashore are very strictly regulated, and one lands from inflatables (pangas) in small groups accompanied by a mandatory licensed guide. We had opted to cruise the islands on a small catamaran with eight cabins and a maximum of 16 guests, and this enabled us to maximise our photo opportunities and visit some of the sites inaccessible to the larger vessels.

The *Athala 2* proved to be an excellent choice, for the vessel was immaculate, spacious and extremely well run. The ten-strong crew were well rehearsed in the daily routine. The Captain (watch-on stop-on for six weeks) repositioned the catamaran overnight, which generally involved a passage of about sixty miles, anchoring off the first landing site in the early hours. Guests were woken at 0630



Plates 76–78. Blue-footed Boobies in the dive.

and given a hearty breakfast before embarking in the pangas for a wet or dry landing. Wet landings involved wading ashore and dry landings were onto rocky ledges or rudimentary jetties. Once ashore the guide led us around a well marked route. We were extremely fortunate in having a very knowledgeable guide who spoke excellent English and was particularly interested in birds.

We saw a selection of stark and beautiful volcanic islands which demonstrated the sequence of events in the birth life and death of a volcano. Even more interesting was the story of the evolution of plant life, followed by birds and animals, on those islands. Having arrived by various means from mainland South America and elsewhere they then adapted to the harsh local conditions, and isolation from the mainland and from each other led to marked differences in the flora and fauna. For example, each island we visited had a different variant of Mocking Bird and Yellow Warbler as well as the famous and well documented Finches. The same cannot be said of the seabirds, most of which are pelagic and therefore have not evolved so obviously differently - the exceptions are the Flightless Cormorant *Phalacrocorax herrisi*, which we didn't see, and the Galapagos Penguin *Spheniscus mendiculus,* which we did. This is the tally of other seabirds seen and photographed:

Table 1. Our seabird list.

Audubon's Shearwater *Puffinus lherminieri*
Blue Heron *Ardea herodias*
Blue-footed Booby *Sula nebouxii*
Brown Noddy *Anous stolidus*
Brown Pelican *Pelecanus occidentalis*
Galapagos Storm-petrel *Oceanodroma tethys*
Greater Flamingo *Phoenicopterus roseus*
Great Frigatebird *Fregata minor*
Lava Gull *Larus fuliginosus*
Lava Heron *Butorides sundevalli*
Swallow-tailed Gull *Creagrus furcartus*

We were struck by the relative small numbers of many birds compared with the picture presented on wild life programmes. Some of this seems to be natural population cycles but other changes probably result from major climatic events such as El Niño and may even be tourism related.

We became very aware of the impact of humans on bird populations from whaling days onward and aware too of the efforts

Plate 79. Displaying male Blue-footed Booby.

Plate 80. Lava Heron.

Plate 81. Galapagos (wedge-rumped) Storm-petrel.

Plate 82. Audubon's Shearwater.

Plate 83. Blue Heron and Blue-footed Boobies.

Plate 84. Lava Gull.

Plate 85. Brown Noddy.

Plate 86. Brown Pelican.

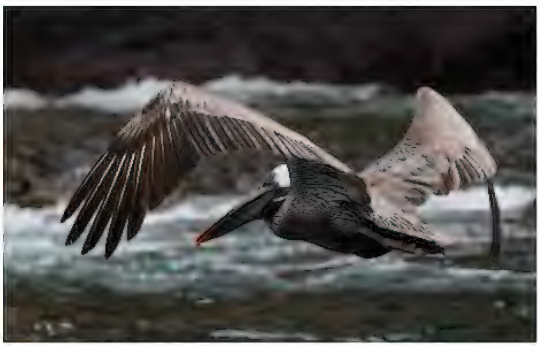


Plate 87. Brown Pelican.

Plate 88. Greater Flamingo.

Plate 89. Juvenile Greater Flamingo.

now being made to save and in some cases reinstate species devastated by goats, rats, invasive plants - and humans. Nevertheless, it is difficult to see how these very specialised environments can survive tourism even with the quotas and regulation of visits which are now imposed by the Ecuadorians. Our ship was small and things like waste carefully controlled but one wonders about some of the larger vessels, and one wonders too about the care taken by populations in the inhabited islands who are mostly employed in the tourism industry.

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Plate 90. Birds on deck, mainly Palm Warblers.

Migrants at Sea - Iceland to Costa Rica

by Simon Cook

(*Photographs by the author*)

With a heavy sea running and the wind gusting to storm force the chances of getting safely into the little harbour of Heimaey in the Westmann Islands were slim indeed. This was to be the first port of call since leaving Iceland's capital, Reykjavik, the previous night. My job on the *MV Fram* was lecturer and naturalist for the 125 passengers and our itinerary would take a month to complete: Iceland, British Isles, Canada, USA and Central America. It was September 2007.

Things were quiet until just after leaving Cork, our last port in the British Isles. The following morning we were sailing two to three miles off the south coast of Ireland, passing close to the Fastnet Rock. The first bird of the day was a Peregrine *Falco peregrinus*, which was heading towards land and plucking a small victim as it went along. Two Pied Wagtail *Motacilla alba* and a Meadow Pipit *Anthus pratensis* flew around the ship, a Great Shearwater *Puffinus gravis* was seen and an unexpectedly early Little Auk *Alle alle* buzzed by. By late afternoon we were 125 miles SSW of Mizen Head and my attention was drawn to a swirl of motion in the air below me. Looking down I got an impression of something like a sparrowhawk but it disappeared rapidly from view. However, looking to my left I was amazed to see a Merlin *Falco columbarius* sitting on the handrail just a few feet from me. It had been chasing a Meadow Pipit which had been driven into a window and become dazed but the Merlin was put off by people nearby. I retrieved the pipit and put it in a box in my cabin for recovery and later release.

Plate 91. Merlin on the rescue boat.

Plate 92. Laughing Gulls, Port Canaveral, Florida.

The Merlin was with us throughout the following day (the 27th) and it became very tolerant of people, allowing close views of this tenacious little predator. The following morning I was very surprised to find it plucking and eating a Northern Wheatear *Oenanthe oenanthe*. By now we were over 700 miles from Mizen Head and I thought what bad luck for the wheatear to encounter possibly the only ship in the North Atlantic with a Merlin on it. The unfortunate bird was completely devoured in the course of just thirty minutes and even the legs and feet were consumed. The Merlin was still aboard at noon but when I searched for it after lunch I couldn't find it. Where might it have gone?

Canadian waters were pretty much devoid of migrants, apart from the odd Peregrine. However, after dawn on 5 October we were crossing the Gulf of Maine, en route from Nova Scotia to Bar Harbour when things started to liven up. The weather was fine and the sea glassy. Dozens of small land birds flew past the ship and seemed to be a mostly sparrows and Dark-eyed Juncos *Junco hyemalis* but three Pine Siskins *Spinus pinus* and a female Pine Grosbeak *Pinicola anucleator* came close enough for me to identify. Not many birds came aboard but there was a nice variety of species: three or more Juncos plus another found dead; six-plus White-throated Sparrows *Zonotrichia albicollis* with another found dead, a Mourning Dove *Zenaida macroura*, a Winter Wren *Troglodytes hiemalis*, a Red-breasted Nuthatch *Sitta canadensis* and best of all a sparkling male Golden-crowned Kinglet *Regulus satrapa*. The sea wasn't quiet either, with Great Northern Divers *Gavia immer*, Great Shearwaters *Ardenna gravis* and ten or more huge Fin Whales in sight.

On the morning of 6 September I accompanied a group of passengers on a whale-watching trip from Gloucester, Massachusetts to the nearby Stellwagen Bank. We watched 15–20 unexpectedly close Harbour Porpoises, 11 very obliging Humpback Whales and 150–200 excitable Atlantic White-sided Dolphins. We were about 13 miles offshore, and land birds were far from my thoughts. Then all of a sudden a Song Sparrow *Melospiza melodia* appeared around the boat and I watched as it flew over two of the cavorting whales. Shortly afterwards a Dark-eyed Junco repeated the trick with some of the dolphins. The following morning found us coming into Newport, Rhode Island and several migrants came aboard: two Savannah Sparrows *Passerculus sandwichensis*, a White-throated Sparrow and a Yellow-rumped Warbler *Setophaga coronata*, while flying off the ship were a Mourning Dove, a Northern Flicker *Colaptes auratus* and a large bat.

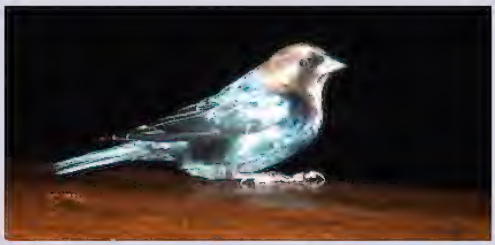

Plate 93. Brown-headed Cowbird.

The ninth of October was something of a red letter day for me because not only did we sail into New York harbour but I saw my two hundredth species of bird on board a ship or boat. Cruising under the Verrazano Narrows Bridge before dawn we proceeded slowly to the Statue of Liberty, where we paused for photographs at sunrise before doing something very unusual indeed. Our berth was on the Hudson River, on the west side of Manhattan but since we had some time to

Plate 94. Male Prairie Warbler.

Plate 95. Male American Redstart.

spare our pilot took us slowly up the East River, almost to Manhattan Bridge, where I was thrilled to see the great sailing ship the *Peking*. Having landed on Cape Horn and having seen many times Captain Irving Johnson's film of his rounding of the cape in a huge storm in 1929 in the *Peking* I was very excited to see the grand old lady herself at the pier-side. Turning in our own length we retraced our course then went up to our berth at Pier 92, from where I watched a pair of metropolitan Peregrines.

Earlier on I had done my daily pre-dawn deck patrol and was pleased to see more avian visitors in the form of two Savannah Sparrows, three White-throated Sparrows and a Palm Warbler *Setophaga palmarum*. The most exciting bird was a male Brown-headed Cowbird *Molothrus ater*, which somehow managed to cling onto a varnished handrail in quite windy conditions. This was number 200 and I was able to get prolonged and very close views. It finally left the ship just before we reversed course, and headed off towards the maze of nearby skyscrapers.

The sea area off Cape Hatteras, North Carolina is where seabirds often gather, with petrels the most eagerly sought, and I hoped I might see one of the approximately 160 extant Bermuda Petrels *Pterodroma cahow*. I wasn't successful in this, but I was thrilled to see my seabird highlight of the trip, a group of Black-capped Petrels *Pterodroma hasitata*, close to the ship. These very distinctive birds come from their Caribbean breeding grounds to feed in the Gulf Stream.

At Port Canaveral I accompanied passengers on a two-hour wildlife cruise. The area didn't look very promising so my expectations were pretty low, but I was quite wrong. Birds included several Ospreys *Pandion haliaetus* and even more vultures - Turkey *Cathartes aura* and Black *Corgyps atratus*. Waterbirds were to the fore and included 21 Wood Storks *Mycteria americana*, five Great Egrets *Ardea alba*, a White Ibis *Eudocimus albus*, 16 Brown Pelicans *Pelecanus occidentalis*, four Great Blue Herons *Ardea herodias*, five Snowy Egrets *Egretta thula*, two Little Blue Herons *Egretta caerulea*, 18 Double-crested Cormorants *Phalacrocorax auritus* and single Royal and Caspian Terns *Thalasseus maximus* and *Hydroprogne Caspia*. The only land bird seen was a Northern Mockingbird *Mimus polyglottos* but it was wildlife in the water that was most exciting. A single bottlenose dolphin heralded two alligators, which according to our guide was an exceptional sighting for the area. Also lurking in the water was something that fluked like a Humpback Whale but was something that was new to me - a West Indian Manatee. Part of our trip involved going through a lock and five of these extraordinary animals were feeding there on sea grass, completely oblivious to the small pleasure craft nearby.

On 14 October we were off the lower Florida Keys heading for Key West, and after dinner I was on the bridge chatting to the officer of the watch when I saw a flock of egrets appear out of the darkness and fly down the starboard side of the ship. Rushing out onto deck it was obvious that many birds were on the move so I stayed up throughout the night. Many small groups of egrets flew past, while hundreds and hundreds of small birds flew around the ship, with many landing on board.

Plate 96. Buff-bellied Pipit, en route from Iceland to the Outer Hebrides.

In total I counted 70 egrets and five Great Blue Herons. As the night wore on more and more small birds appeared in the air and on the decks, and in all over a thousand individuals were logged. The peak time for birds on the ship was between 0200 and 0300 but by 0400 the sky had started to clear and the birds in the air above began to depart. By 0600 most of those on the ship had also gone and at 0700, as we docked in Key West, I was able to coax those remaining on deck into the air and towards the safety of land. Several warblers had entered the ship and I was called by the captain to catch and release them.

Of the hundreds of birds on board most were of just two species, Common Yellowthroat *Geothlypis trichas* and Palm Warbler - over two hundred of each. With the exception of a solitary Red-eyed Vireo *Vireo olivaceus*, all the other visitors were warblers too. The birds in the air were unidentifiable but as they reflected the light from the ship they appeared as a living, swirling blizzard.

Many of the North American wood warblers are little gems so to see them at such close quarters was a real treat. The next most numerous species, with over 30 individuals, was the American Redstart *Setophaga ruticilla,* with both brown-and-yellow females/immatures and superb, tail-fanning, black-and-orange males. Other good sightings included several male Black-throated Blue Warblers *S. caerulescens,* about ten Northern Parulas *S. americana*, six male Prairie Warblers *S. discolor* and three Magnolia Warblers *S. magnolia*. There were also single warblers of the following species: Ovenbird *Seiurus aurocapilla*, Blackpoll *Setophaga striata*, Tennessee *Oreothlypsis peregrina* and Yellow-throated *Setophaga dominica*. The canniest of all the birds though was a male Black-and-white Warbler *Mniotilta varia*, which instead of just landing and sitting or flying around in a panic used its time to hunt under deck lights. By this means it came across and ate no less than four small moths.

My last night on the ship was on 21/22 October and we were heading more or less due south towards Puerto Limon in Costa Rica. During the early part of the night we had rain and lightning and more birds arrived on board. I was later told by passengers that they had seen hundreds in the early hours. However, I was still in bed and just caught the last few dozen on the ship from 0445 onwards. There was another good mix, with vireos and warblers in the majority. Other birds included a nervous Green Heron *Butorides virescens*, up to ten Summer Tanagers *Piranga rubra*, three Eastern Kingbirds *Tyrannus tyrannus*, an Eastern Wood Pewee *Contopus vireus*, an Acadian Flycatcher *Empidonax virescens* and a female Dickcissel *Spiza americana*.

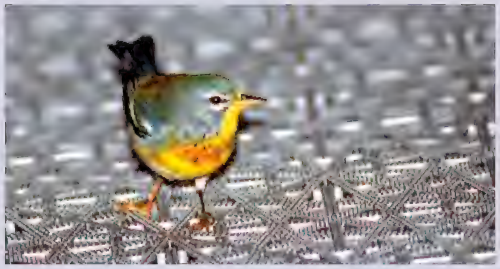

Plate 97. Northern Parula.

Plate 98. Male Black-and-white Warbler.

My voyage ended later that day in Puerto Limon and my expectations had been more than fulfilled. However, that is not quite the end of the story, for there is a postscript to the Merlin and Meadow Pipit saga. Having rescued the hapless pipit and seen the Merlin fly away I seized the opportunity to release the pipit, brought it up to the promenade deck and feeling quite pleased with myself placed it carefully amongst a nest of stacked deck chairs. I then repaired to the dining room but was barely seated when there were cries of "Simon, look at this!" At the stern of the ship and running the full width of the dining room was a narrow, glass-walled and mostly enclosed balcony. Making my way between the tables of eating diners I looked through the windows to see, much to my chagrin, that the Merlin too was eating ...the pipit!

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Little Bunting on board ship

by Malcolm Calvert
(*Photographs by the author*)

It was on a cruise in 2012 that a fellow passenger mentioned RNBWS and I was delighted to discover on the website that anyone with an interest in birds at sea could be a member. I am a lifelong bird enthusiast, largely land birds it has to be said, but now that I am retired after a career in the financial services industry I have the time for a new challenge - seabird watching. I do have one publication to my name by the way, a book on the Reed Warblers at Rostherne Mere, published by English Nature in 2005.

My wife and I joined *MV Black Watch* (which features in David Ballance's article, *Sea Swallow* 62, p25) in Liverpool on 13 August 2015 for a two-week cruise that was to take us to Newfoundland, Nova Scotia, and Labrador and back - via two marvellously calm Atlantic transits I am glad to say.

On the return crossing, about 500 miles south of Iceland, a juvenile *alba* Wagtail landed on board. We decided that this was a 'white' *Motacilla alba alba* from its plumage and conjectured that it probably came from the migratory Iceland population.

Plate 99. Little Bunting, North Atlantic.

Plate 100. Little Bunting.

Shortly after lunchtime on 28 August I was informed that another small passerine had landed on board, the ship now some 300 miles west of Ireland and due to arrive in Belfast next day. This bird was of striated brown plumage, and cursory views suggested a small Reed Bunting *Emberiza schoeniclus* but as it scuttled between the chairs at the stern of deck 6 and we were able to bring binoculars and long-lens cameras to bear it soon became obvious that this was not a Reed Bunting, and its small size suggested a Little Bunting *Emberiza pusilla*. I noted that the short tail had little white in the outer feathers, and to me two other features stood out. The first was that when seen face-on the head resembled three parts of a shamrock with the central crown markings matched by the pattern of the rufous-buff cheeks, and the second was that when seen from the side or rear the white edging on the median and greater coverts gave the bird a 'painted' appearance. A fine whitish orbital ring was also evident, and on later examining my photographs I could see the clean edge to the flight feathers with the tail feathers suggesting points with little or no wear.

On consulting various books and field guides I decided that the identity of Little Bunting was beyond doubt. Literature states that the breeding range is Norway, Russia, Finland and Sweden, and the autumn migration is generally in a south-easterly direction taking the birds towards China, the main wintering area being south of the Yangtse river. Inevitably, however, some young birds get lost and through inexperience and prevailing weather conditions drift off course.

I looked at the *Birdguides* website and found that the last recorded instance of Little Bunting in Britain was on 28 April 2015 at Snettisham on the Norfolk coast. *Birds of the Western Palearctic* (which gives an overall length of 13–14 cm for Little Bunting compared to 15–16.5 cm for Reed Bunting) states the species is accidental to Iceland, Britain and Ireland. Researching the RNBWS on-line database I find that this was the first time that it had been recorded at sea.

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Masked Boobies *Sula dactylatra* sighted in the Northern Arabian Sea

by Abhishek Jamalabad
A marine biologist who works in marine conservation research on the west coast of India.

This note records the sighting of a group of nine Masked Boobies *Sula dactylatra* in the northern Arabian Sea on the morning of 21 February 2013 in position 20.6N, 65.6E, which is 219 nautical miles from the Indian coast. The sighting occurred during a scientific cruise conducted for Tsunami warning system maintenance. The group of birds was seen perched on a large buoy which forms a part of the warning system, and consisted of adults and immature birds, some of the latter seemingly not yet fully adept at flight. There was no evidence that birds had nested on the buoy Some of them, initially solitary and later in pairs, were attracted to our ship as we approached the buoy. They all took flight during the maintenance operation (involving retrieval of the buoy and installation of a new one) and were seen circling in the area, some perching on the higher parts of our ship. When we left next day they were nowhere to be seen.

Plate 101. Masked Boobies. © *Abhishek Jamalabad*

The Masked Booby *Sula dactylatra* is the largest of the three species of booby recorded in and around the territorial seas of the Indian subcontinent (the other two are the Brown Booby *S. leucogaster* and the Red-footed

Plate 102. Masked Boobies in flight. © *Abhishek Jamalabad*

Figure 1. Masked Booby sightings from the RNBWS online database

Booby *S. sula),* and sightings are rare. They are thought to breed on the Lakshadweep and Maldives archipelagos, and have been recorded in the west coastal waters of the subcontinent (Grimmett *et al.* 1999).

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Database Manager's Note

Our database shows a number of sightings of this species of booby in Arabian Sea from regular contributors such as Captain Peter Chilman (1977), Commander Mike Barritt (2000) in HMS *Beagle* and Bill Bourne (1988) in RFA *Tidespring*. These and others are illustrated in the map which clearly shows the distribution from shipping lanes along the coast of Oman, in the Arabian Gulf and Gulf of Oman (SE stands for Single Entry by the way). Jamalabad's sighting in the middle of the Arabian Sea tropical waters adds to the picture and is a welcome addition. The scale of the map does not show separately the sighting by Captain David Simpson in MV *Big Orange XV*, almost exactly 26 years earlier, when he reported a total of 67 in small parties between Oman and India in mid-February 1987, with 60 around 19.3N 63.5E on the 19th (*Sea Swallow* 38 p19).

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Black-winged Petrel - probable first for South America

by Warrant Officer Tony Tindale

With the austral summer drawing to an end the Royal Navy Ice Patrol Ship HMS *Protector* completed Antarctic tasking on 28 March 2014 and headed north across Drake Passage to visit Punta Arenas, Chile, en route to a maintenance period in Charleston USA. However, instead of remaining in the Atlantic Ocean *Protector* took the Pacific Ocean route via the Patagonian Canal and the Panama Canal, and if one looks at the chart it is a surprisingly direct route. The plan was to visit Lima, Peru during the passage north but because of regional sensitivities the necessary diplomatic clearance was not forthcoming, and as a result the ship remained at sea, and took a track that was much further off the coast than originally planned. That proved fortunate from a birding point of view. I had never been in the Pacific before but fellow birder Steve Copsey had, on the destroyer HMS *York* in 2011, but on that

occasion the ship had taken a more inshore track and on comparing the records of the two journeys north it was interesting to see how the birds differed.

Neither of us realised the significance of one particular sighting we reported from *Protector,* and it wasn't until August the following year, when both Steve and I had left the ship that Alvaro Jaramillo, co-author of the 'Birds of Chile' Field Guide, the very book we had referred to during our earlier birding exploits in Punta Arenas, got into contact with us. He had discovered our 'Three Amigos Birding' Blog on the Internet, and was keen to know if any of our sightings of Antarctic Petrel *Thalassoica antarctica*, Black-winged Petrel *Pterodroma nigripennis* or Leach's Storm-petrel *Oceanodroma leucorhoa* had been within Chilean waters, and asking for the latitude and longitude of our sightings for those particular species. I duly supplied the information he requested and learned that the Black-winged Petrel encountered on 17 Apr 14 at 23.8S 78.5W prior to crossing the Tropic of Capricorn was not just a first for Chilean waters but a likely first for South America.

The identification of the different species of the 'cookilarias' *Pterodroma* petrels with a Pacific distribution that reaches east towards the South American Continent (Gould's, Cook's, De Filippi's, Stejneger's, Black-winged and Collared) and the larger Galápagos Petrel *Pterodroma phaeopygia* is not straightforward. All have grey upperparts with a dark 'M' marking across the open wing and white below with varying amounts of dark underwing markings. However, despite the similarities the Black-winged Petrel has the most conspicuous underwing markings, comprised of a broad dark trailing edge and broad dark tick mark extending over halfway towards the body.

Plate 103. Black-winged petrel showing upperparts, East Pacific, 17 April 2014. © *Steve Copsey*

Plate 104. Black-winged Petrel, showing underparts. © *S Copsey*

Being a new bird to both of us we rattled off dozens of shots with our DSLR cameras whilst the bird banked from side to side as it swiftly passed the ship at 12:35 during our daily lunchtime birding session on the upper deck. Although *Protector* was well off the South American mainland she was within the 200 nautical mile Exclusive Economic Zone (EEZ) of the Chilean Desventuradas Islands, which are 500 miles west of the continent, and consequently within South American waters. Jaramillo subsequently published the record in the rare bird roundup of the online magazine 'La Chiricoca' for acceptance by the 'Red de Observadores de Aves y Vida Silvestre de Chile' (ROC) Chilean bird observation network.

The following day (18 Apr 14), to the north of the Desventuradas Islands EEZ, Steve and I encountered a further five Black-winged Petrels. The additional sightings supported Mr Jaramillo's suspicion that Black-winged Petrel had either previously been overlooked in the area or was expanding its range to the east.

Wildlife diversity is not a factor considered in the planning of Royal Navy operations, and it was not considered when the decision to take *Protector* on a more westerly route was taken, but it certainly worked for us this time. Warships quite often take little-used routes, so their observations can be of real significance, as our sightings of Black-winged Petrel have shown.

Reference

Onley D & Scofield P (2008). *Albatrosses, Petrels and Shearwaters of the World*. London: Christopher Helm.

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Fruit Doves on board - 12 months apart

by Simon Cook
(*Photographs by the author*)

Plate 105. Male Yellow-bibbed Fruit Dove, 6 Jan 2014.

This note documents the remarkable at-sea occurrence of four Yellow-bibbed Fruit Doves, *Ptilinopus solomonensis*, aboard the MV *Caledonian Sky* - 12 months apart but in the same area of the South Pacific.

Yellow-bibbed Fruit Dove is a small, resident, forest species and is found on the Admiralty Islands, St. Matthias Islands, the Bismarck Islands and the Solomon Islands. Dutson (Birds of Melanesia 2011) lists nine subspecies, all endemic to various islands/island groups. On Guadalcanal the endemic *ocularis* has the purple cap reduced to a small spot in front of the eye so the male that I saw was possibly either *solomonensis* from Makira, Ugi and the Three Sisters or *ambiguus*, from Malaita. On Guadalcanal, Yellow-bibbed Fruit Dove is found on mountains, usually above 600–700 metres, whereas on Makira and Malaita they are common down to sea level.

2014

On 6 January at 06.30 the ship was making its approach to the port of Honiara, Guadalcanal and my wife and I were on the starboard bridge wing. We saw a small green bird flying low and fast down the side of the ship towards the stern, whither I immediately ran. Seconds later I found an exquisite male Yellow-bibbed Fruit Dove sitting on one of the guardrails. It seemed untroubled by my presence, sat there for seven minutes, excreted and then flew away. The ship's position was 9.6S, 160.2E, course 256°, wind 6 knots from the south; we were 4 nautical miles offshore and Honiara was in sight.

Only two of the passengers had any interest in birds and it was they who later told me that the dove had been on their balcony all night; having first been noticed at about 23.00. At 05.00 the following day during a round of the ship I found a dead female on one of the upper decks. It is possible that the two birds arrived together but that the female was killed by flying into a bulkhead or a pane of glass.

2015

During the night of 21/22 January the ship was again approaching Honiara. At 20.52, during dinner, I saw a female Yellow-bibbed Fruit Dove flying around the canopy-covered dining area on deck 5. I then saw it briefly as it sat on deck 6 but it soon flew off. Returning to the dining area I found that it had been picked up by one of the passengers. Quickly recovering it I took the bird to my cabin and placed it in a box for the night. The ship was 11 miles north of San Cristobal Island and 6 miles east of Uki Ni Masi at 10.3S, 161.9E, course 310°, wind northerly, 4 knots.

Plate 106. Female Yellow-bibbed Fruit Dove, 22 January 2015.

At 23.00 I flushed an immature bird of the same species from the by now empty dining area on deck 5. It flew away but I relocated it at 23.53; it was perched below the starboard lifeboat. However, it was very skittish, flew up out of sight and was not seen again. The following morning we docked in Honiara and during breakfast I brought the female up onto deck to show her to the people there. Placing her carefully on a guardrail I expected her to fly away but she just sat there. Giving her a little nudge to encourage her to leave, we were all surprised when she merely hopped up onto my hand. However, after a minute or two she flew strongly away to a nearby wooded hill.

The sighting of the male on the ship was exciting enough but to have a repeat performance a year later by the same species was astonishing. What forest-dwelling, resident birds were doing out at sea in weather that was not at all out of the ordinary remains a mystery. The only precedent that I can recall for this kind of double-whammy encounter concerns not birds but Blue Whales. On two occasions, sailing south from Arica, northern Chile, I saw a single animal, and although in time the two sightings were 12 months apart the whales' positions were within 1 nautical mile of each other.

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Plate 107. Dead female.

13th International Seabird Group Conference

by Captain Stephen Chapman, MN

This biennial gathering, held this year at the University of Edinburgh, provided fine quality soundings of current research and findings in the global seabird study arena. It was notable for its warm atmosphere and concentrated mix of presentations, speed talks and poster displays. Delegates came from Russia, New Zealand, Canada, USA, Mexico, Turkey and across the EU. To summarise 130 technical papers in a few paragraphs is clearly impossible, so I note here a few highlights.

Wildlife is under pressure from expanding human presence and changing farming practices worldwide; for seabirds the legacy of invasive alien species on remote islands has brought many endemics to the brink of extinction. Goats, rodents, cats and mustelids are among the most destructive introductions, and ground and burrow nesting seabirds are especially vulnerable to such predation. The story of the one success in restoration was graphically related by Tony Martin of the South Georgia Heritage Trust. What this massive project demonstrates is that with careful planning, and the use of helicopters and GPS technology it is possible to bait large areas and eradicate invasives, rolling back centuries of human related damage in a short space of time. As Tony explained it is easier to clean up uninhabited islands than those with people, where the bait has to be laid by hand.

Yuliana Bedolla-Guzmán from Mexico explained the measures put in place over the last 20 years for controlling invasive mammals. Mexico has 4,500 offshore islands and is second place in the global league of endemic seabird species. So far they have successfully removed 58 populations of invasive mammals on 37 islands. Seabird recovery has been a major outcome. The national strategy goes further than eradication; it includes reafforestation, involvement of young people and putting in place biosecurity.

But it is not only on shore that seabirds are threatened: The Convention on Biological Diversity aspires to designate 10% of the global oceans as Marine Protected Areas. But how to define the areas? Data from tracking devices on globally threatened pelagic birds help to identify sites for marine conservation, such as around the Tristan archipelago. Seas which fall within territorial seas may be defined, but conservation of highly mobile pelagics requires a multi-national approach at an ocean-basin scale, explained Steffen Oppel of the RSPB.

Of the many other papers delegates enjoyed talks on tracking, behaviour, weather impact, migration, mercury contamination, changing diet with shifting and declining sand eel populations and the translocation of Hutton's Shearwaters *Puffinus huttoni* to establish a new and secure colony. What has been a game changer for distribution studies is the leap ahead in position fixing accuracy with GPS tags, and the economics of marking birds without relying on expensive and coarse data from satellites. A paper presented by Paulo Catry of MARE in Lisbon compared the feeding behaviour of the predominantly diurnal Cory's Shearwater *Calonectris borealis* and the nocturnal Bulwer's Petrel *Bulweria bulwerii*. Now I understand why this small petrel was so difficult to see when I was sailing around the Atlantic Islands: they sit on the sea all day. The conference concluded with a hard hitting presentation by Professor Tim Birkhead on the need for continued funding to continue research on seabird islands like Skomer, and for proper training and supervision of monitors. An abstract of all the papers can be found at www.rnbws.org.uk

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Notes on seabird reports received 2015

by Captain Stephen Chapman, MN

This year's report follows the established format and systematically notes highlights from the material received from members at sea. It aims to be concise, list all observers and their voyages, and capture highlights of their sightings for the calendar year 2015. It concentrates more on observations of unusual and seldom reported species; observations from areas rarely visited; large concentrations of birds; reports of evidence of migration and reports of unusual behaviour and feeding observations. The taxonomy follows the Revised RNBWS Checklist of Seabirds (2013).

The report also includes selected citations from literature where these are relevant to seabird distribution.

This year following the initiative of the RNBWS Regional Representative for India, Praveen J we include some sightings reported from systematic pelagic bird surveys by a teams of observers organized by Kerala Forest Dept (KFD), Kottayam Nature Society (KNS), Cochin Natural History Society (CNHS) and Malabar Natural History Society (MNHS). These observations are filed on eBird, with selected high lights noted here.

Remote voyaging

A journal that has a special interest in avian systematics, taxonomy and distribution is the quarterly *Bulletin of the British Ornithologists' Club*. The Club organises conferences at the London Natural History Museum, in partnership with others including the African Bird Club, the Neotropical Bird Club and Ornithological Society of the Middle East. Seabirds often feature in the presentations and discussions. With tour companies and adventure cruise ship companies meeting the needs of amateur naturalists, listers and tick hunters there is growing band of birders looking offshore. Pelagic excursion offerings in small boats are growing. The activity off the relatively calm coasts of southern India is but one example. More focused are the research expeditions of ornithologists Hadoram Shirihai, Vincent Bretagnolle and colleagues reaching increasingly remote parts of the tropical oceans. Following earlier voyages to Gau Island, Fiji (Shirihai *et al.* 2009); Más Afuera Island, in the Juan Fernández archipelago (Shirihai *et al.* 2014a); Réunion, Indian Ocean (Shirihai *et al.* 2014) the duo continued in the western Indian Ocean locating the Mohéli Shearwater *Puffinus (persicus) temptator* at sea off the islands of Grande Comore, Mohéli and Anjouan, and documenting its plumage photographically for the first time (Shirihai & Bretagnolle 2015a). On that latter expedition they also documented the largest numbers ever recorded of *Bulwaria* petrels in the western Indian Ocean away from Arabia. They also described in detail the appearance of a silvery slate-blue upperwing bar (on fresh greater coverts, in all petrels in moult) which was a constant feature on all (non-juvenile) Comoros *Bulwaria*, despite being very rarely noted in Jouanin's *B. fallax* off Arabia (Shirihai & Bretagnolle 2015b).

Our role here is clear. If passing through the area, get the best photographs possible of *Bulwaria* petrels and if one should land on board take photos and a detailed plumage description and measurements.

Identification of three European nesting Shearwaters

Manx Shearwater *Puffinus puffinus*, Yelkouan Shearwater *P. yelkouan* and Balearic Shearwater *P. mauretanicus* can be difficult to identify in some situations. A lengthy paper in *British Birds* (Marcel Gil-Velasco *et al.* 2015) presents a detailed review of the plumage variability of the three taxa; combined with an understanding of the structural differences and flight characteristics, this should provide a sound basis for the identification of problematic individuals, say the authors. If you are fortunate enough to get a sighting, as in their plate 288, of Balearic and Yelkouan side-by-side, the larger size and

bulky pot-bellied structure of Balearic, and the slimmer, more attenuated appearance of Yelkouan are immediately clear.

Some highlights of 2015 voyages

These days there is an increasing number of *tweets* from seabirders seeing exciting birds in remote places, or pushing the boundaries in pelagic trips getting to a shelf edge or other area where birds may congregate or be attracted by chumming with fish oil or blocks of frozen offal.

However, we continue to receive records from a dedicated group of observers who reach places that others do not visit and their records are being added to the Society's electronic database accessible on our website. In this year David Ballance enjoyed a voyage to Spitsbergen and beyond which echoed a journey from 2014 (Chapman 2015), but following a slightly different selection of ports. He comments on the presence of Northern Gannets *Morus bassanus* beyond the islands and skerries, which do not usually enter the fjords in fine weather.

On HMS *Richmond* Mark Cutts made a voyage that took him from Plymouth through Suez into the Indian Ocean and Arabian Sea to Goa (see page 69) before he finally swallowed the anchor and retired inland to Wales.

Simon Cook continues to send exciting reports from the four corners of the earth. A voyage from New Zealand to Borneo was followed by another 'Atlantic Odyssey' embarking on MV *Plancius* in Ushuaia for the Antarctic Peninsula, South Georgia, Gough Island, Tristan, St Helena, Ascension and the Cape Verde Islands. Next MV *Caledonian Sky* took him from Kupang, Timor to Wyndham and Broome in north west Australia. Exceptionally he noted a Barau's Petrel *Pterodroma baraui* of which a few have been recorded off western Australia in the past. Finally, in 2015 MV *Silver Discoverer* took him to Bering Island off the Kamchatka Peninsula where he saw thousands of Fork-tailed Storm Petrels.

During the early part of the year under review both WO1 Steve Copsey and WO1 Tony Tindale continued a deployment on HMS

Table 1. The data in the analysis that follows is from these voyages. Our thanks go to all these observers for their systematic records.

David K. Ballance (DKB)	mv *Black Watch*	Avonmouth to North Cape, by the North Channel, Cape Wrath and Norwegian ports and return to Avonmouth. September. 18 page log book of census sightings and notes.
Stephen E Chapman (SEC)	mv *Normandie*	Channel crossing Caen - Portsmouth. October. 1R.
Simon G. Cook (SGC)	mv *Caledonian Sky*	New Zealand to Borneo: Milford Sound, Stewart Island, Norfolk Island, New Caledonia, Vanuatu, Solomon Islands, south coast of New Guinea (including Thursday Island, Australia), various small Indonesian islands - Sulawesi - Sandakan (Malaysian state of Sabah, north Borneo). January–February. 13 page report.
	mv *Plancius*	Ushuaia, the Antarctic Peninsula, South Georgia, Gough Island, Tristan da Cunha, St. Helena, Ascension Island, Cape Verde Islands. March–April. 16 page report.
	mv *Caledonian Sky*	Three cruises: firstly Kupang, Timor (Indonesia) to Wyndham, Australia, Broome; then two consecutive trips from Kupang to Broome and Broome to Kupang. June–August. 7 page report.
	mv *Silver Discoverer*	Nome, Alaska, Russia (Chukotka, Bering Island in the Commander Islands, Kamchatka & Sakhalin Island, Sea of Japan, South Korea, to southern Japan, Ryukyu Islands, Keelung and Taipei. August–September 2015. 18 page report.
Mark Cutts (MC)	HMS *Richmond*	Plymouth, Suez, Bahrain into the Indian Ocean and Arabian Sea, Goa. March–July. 1R on Excel
Capt. Thomas Johannsen (TJ)	mv *Georg Oldendorff*	Coafeidian, Hebei, China to Singapore and Saldanha Bay, June–July 3C
WO1 Steve Copsey (SC) & **WO1 Tony Tindale** (TT)	HMS *Protector*	Southern Ocean, Antarctica, Scotia Sea and Weddell Sea. December 2014–February 2015. 12R on Excel.

Note. Observers are referred to by their initials. Dates refer to 2015 unless otherwise noted. Positions are given in degrees and decimals of degrees of latitude and longitude. nm = nautical miles (1.852 km), Ad = Adult, hr = hour(s), imm = immature, C = census sheets, R=report sheets.

Protector taking advantage of opportunities for seabird recording and taking photographs. The voyage in 2015 took them from the Falklands to the Antarctic Peninsula, South Orkneys and thence far south to 72°, spending a week south of the Antarctic Circle, before returning via South Georgia.

PENGUINS *Spheniscidae*

Emperor Penguin *Aptenodytes forsteri* Several sightings of groups <6 birds were reported by TT/SC on 1 Feb at 71S, 20W with an imm on pack ice on 29 Jan at 62S, 30.6W. **King Penguin** *Aptenodytes patagonicus* on 31 Mar SGC recorded 7 at 56.1S, 40.5W in the Scotia Sea and 4 on 1 Apr at 54S, 36.9W. **Chinstrap Penguin** *Pygoscelis antarcticus* Sailing in high latitudes SC/TT recorded small numbers from 55.6S, 32.1W to 63.2S, 62.9W in Dec 14 to early Feb 15 with 30 on 18 Dec 14 at 61.7, 62.9W. SGC noted 16 on 27 Mar at 64S, 60.8W; 10 on 20 Mar at 60.6S, 51.2W; and 2 next day at 58.9S, 46.5W.

ALBATROSSES *Diomedeidae*

Tristan Albatross *Diomedea (ex.) dabbenena* On 6 Apr SGC noted 2 at 46.9, 21.6W; next day 30+ at 44.2S, 16.2W; 2 on 13 Apr at 33.4S, 11W and 1 imm at 33.1S, 10.9W. **Northern Royal Albatross *Diomedea sanfordi*** SGC noted 14 on 7 Jan at 41.3S, 174.5E in the Cook Strait and 10 on 9 Jan at 39.2S, 178.2E. **Black-footed Albatross** *Phoebastria nigripes* On 27 Aug SGC saw 4 singles 49.8N, 151.5E, in the Sea of Okhotsk. **Laysan Albatross** *Phoebastria immutabilis* On 21 Aug SGC saw 4 heading north 55.5N, 166.6E, within sight of Bering Island; on 27 Aug, 11 at 50.0N, 152.3E; and on 28th 1 off southern Sakhalin Island at 47.5N, 144.E. **Black-browed Albatross** *Thalassarche melanophris* TJ first reported 2 at 34.9S, 26.1E on 6 Jul. **White-capped Albatross** *Thalassarche (c.) steadi* SGC noted 9 on 9 Jan at 39.2S, 178.2E. **Salvin's Albatross** *Thalassarche salvini* SGC noted 13 on 7 Jan at 41.3S, 174.5E in the Cook Strait and 19 on 9 Jan at 39.2S, 178.2E. **(Atlantic) Yellow-nosed Albatross** *Thalassarche (ch.) chlororhychos* SGC noted the first one on 7 Apr at 44.1S, 15.8W; 122 in 3 hr on 11 Apr at 37.3S,12.3W, and on 13 Apr heading north to St Helena, 6 were last recorded at 44.3S, 16.5W. **Grey-headed Albatross *Thalassarche chrysostoma***. On 25 Mar SGC noted 5 Ad and 1 imm at 61.3S, 64.8W; 2 on 26 Mar 62.6S, 59.9 W off Livingstone Island; 27 on 29 Mar at 60.6S, 51.2W; 19 on 30 Mar at 58.8S, 46.2W; 1 on 5 Apr at 49.4S, 26.3W; and 1 Ad on 7 Apr at 44.3S, 16.5W. **Sooty Albatross** *Phoebetria fusca* SGC noted 1 on 30 Mar at 58.8S, 46.2W; 7 on 4 Apr at 52.1S, 31.6W and 1 at 51.6S, 30.4W; 13 on 6 Apr at 46.9S, 21.6W; 5 on 7 Apr at 44.2S, 16.2W; 6 on 10 Apr at 37.5S, 11.8W; and 28 on 11 Apr at 37.3S, 12.3W. **Light-mantled (Sooty) Albatross** *Phoebetria palpebrata* SGC noted 2 on 29 Mar at 61.1S, 52.6W and 6 at 60.6S, 51.2W; 2 on 30 Mar at 58.8S, 46.2W; 1 on 4 Apr at 52.1S, 31.6W; 1 at 51.6S, 30.4W; and on 6 Apr 1 imm at 46.6S, 21.0W.

FULMARS *Fulmarinae*

Northern Fulmar *Fulmarus glacialis* According to Flood and van Grouw, 2015 in British Birds, unfamiliar plumage types of the Fulmar have been seen in the North Atlantic. Extra dark, extra pale and those with a dark distal tail-band. Various explanations are offered for these aberrant or variant birds. Observers are alerted to keep an eye open and report such birds. On 22 Aug SGC recorded 100/hr at 54.8N, 166.6E and lesser numbers in the following days further south and west in the Sea of Okhotsk. DKB recorded 80/h at 53.0N, 5.4W on 16 Sep; 10/h at 57.7N,3.4W on 27 Sep; 100/h at 54.1N, 5.1W on 28th in the Irish Sea. **Southern Fulmar** *Fulmarus glacialoides* Sailing in high latitudes SC/TT recorded small numbers from 57S, 60W to 60S, 26W in Dec 14 to Feb 15. On 29 Mar SGC noted c1,200 in the Scotia Sea at 61.1S, 52.6 with 2–300 later at 60.6S, 51.2W. **Antarctic Petrel** *Thalassoica antarctica* Sailing in high latitudes SC/TT recorded small numbers south of 61S in Dec 14 to early Feb 15 where as **Blue Petrel** *Halobaena caerulea* ranged from 60S to 72S latitude. **Cape Petrel** (Cape Pigeon) *Daption capense* Sailing in high latitudes SC/TT recorded small numbers from 53S, 65.2W to 68.5S, 22.7W in Dec 14 to early Feb 15 with 38 at 59.9S, 26.6W. On 29 Mar SGC noted 100+ at 60.6S, 51.2W. TJ first reported 20 at 26.6S, 46.2E on 2 Jul. **Kerguelen Petrel** *Lugensa brevirostris* TT/SC reported 70 on 6 Feb at 60S, 26.6W. SGC reported 4 on 30 Mar at 58.6S, 45.7W; and 36 on 1 Apr at 54.0S, 37.0W. **Trindade Petrel** *Pterodroma arminjoniana* On 14 Apr SGC had good views on 1 at 28.6S, 9.5W and a distant sighting on 24 Apr at 5S,15.6W**. Great-winged Petrel** *Pterodroma macroptera* on 1 Apr SGC recorded 1 at 54.1S, 36.8W

(possible extra-limital record); 1 on 4 Apr at 52.3S, 32.2W and 1 on 5 Apr at 49.4S, 26.3W. **White-headed Petrel** *Pterodroma lessonii* SGC noted 1 on 11 Apr at 37.3S, 12.4W commenting that it was unusual for the Tristan Islands group. **Atlantic Petrel** *Pterodroma incerta* SGC reported his first ever dark morph bird of this Tristan endemic while cruising off the islands on 12 Apr at 37S, 12.2W. **Soft-plumaged Petrel** *Pterodroma mollis* On 10 Apr SGC recorded 300+ at 37.5S, 11.8W. **Mottled Petrel** *Pterodroma inexpectata* On 27 Aug SGC saw 1 at 49.9N, 151.6E, Sea of Okhotsk. **Black-winged Petrel** *Pterodroma nigripennis* SGC recorded 23/h on 13 Jan at 32.5S, 171.5E in the Tasman Sea; later SGC recorded 2–300 of which lots were calling 4–5 squeaky, high-pitched notes with associated chasing at 31.5S, 170.5E; and 100+ next day at 29.2S, 168.1E near Norfolk Island. SGC saw 1 over a shoal of fish at 26.4S, 167.3E on 15 Jan and 109 at 25.9S, 167.2E. **Fea's Petrel** *Pterodroma (f.) feae* When approaching Praia, SGC noted 1 on 29 Apr at 14.8N, 23.5W. **White-necked Petrel** *Pterodroma (e.) cervicalis* SGC noted 1 on 14 Jan at 29.2S, 168.1E. **Barau's Petrel** *Pterodroma baraui* After seeing many shearwaters during the morning of 4 Aug SGC had good but views of one at 12.8S, 126.0E, but not close. This bird's typical *pterodroma* flight pattern stood out immediately. **Gould's Petrel** *Pterodroma leucoptera* SGC noted 1 at 26.5S, 167.3E on 15 Jan. **Collared Petrel** *Pterodroma brevipes* SGC had very good views of one on 13 Jan at 32.3S, 171.3E and 3 at 31.5S, 170.5E. **Bulwer's Petrel** *Bulweria* bulwerii On 16 Apr SGC recorded a first sighting when heading north at 19.3S, 6.7W**.** SGC noted 15 on 16 Sep at 30.0N, 130.4W and 5 on 21 Sep at 25.2N, 121.7E. **Jouanin's Petrel** *Bulwaeria fallax* One sighted in the Arabian Sea at 10.0N, 76.1E on 20 Sep (CNHS) and Shiva Shankar photographed another at 12.8N, 74.5E on 17 Oct.

SHEARWATERS *Procellariinae*

Grey Petrel *Procellaria cinerea* On 4 Apr SGC reported 1 at 52.1S, 31.8W; 1 at 51.9S, 31.0W; 1 at 51.8S, 30.4W; and 4 in 4 hr watch on 6 Apr at 46.9S, 21.6W. **White-chinned Petrel** *Procellaria aequinoctialis* On 1 Apr SGC noted 100+ at 54S, 36.9W. **Spectacled Petrel** *Procellaria conspicillata* On 7 Apr SGC noted 100+ at 44.2S, 16.2W; and on 15 Apr the last seen northbound from the Southern Ocean was noted at 24.6S, 8.3W. **Black (Parkinson's) Petrel** *Procellaria parkinsoni* SGC noted 11 on 13 Jan at 31.5S, 170.5E. **Wedge-tailed Shearwater** *Ardenna pacifica* SGC recorded 26 on 13 Jan at 31.5S, 170.5E in the Tasman Sea; and 300+ next day at 29.2S, 168.1E near Norfolk Island. SGC noted 20 at a shoal of fish at 26.4S, 167.3E on 15 Jan, while on 16 Jan at 20.3S, 169.1E approaching Noumea in early morning c2,000 were seen in one hour. MC reported 3 at 16.6N, 54.5E on 18 Jun. **Buller's Shearwater** *Ardenna bulleri* SGC noted 130 on 8 Jan at 41.7S, 175.3E. **Sooty Shearwater** *Ardenna grisea*. SGC encountered 13–14,000 in one hour on 3 Jan at 45.3S, 166.8E in the Tasman Sea and 500/h next day in the Forveaux Strait at 46.8S, 168.7E. In the tropics SGC saw a solitary bird on 26 Apr at 4.6N 19.4W. On 22 Aug SGC recorded 6–700/hr at 55.3N, 165.6E. DKB recorded 5 at 55.6N, 6.4W with fishing vessels on 16 Sep; 1 off Cape Wrath on 17 Sep and another in a similar location on 27 Sep; 100/hr at 54.1N, 5.1W on 28 Sep. **Great Shearwater** *Ardenna gravis* TT/SC noted at least 50 on 15 Jan at 52.1S, 57.8W of which many were in heavy moult. On 10 Apr SGC recorded 400+ at 37.3S, 11.8W and on 11 Apr 1,000–1,500 at 37.3S, 12.3W. **Streaked Shearwater** *Calonectris leucomelas* SGC noted 2 on 30 Jan at 9.6S, 139.2E; and 37 on 1 Feb at 5.4S, 137.1E. SGC recorded 7 on 17 Jul at 12.8S, 125.4E in the Timor Sea, and 80/h on 4 Aug at 12.8S, 126E; and 26/h at 12.1S, 125.2E. Significant numbers in July/Aug in the Timor Sea is interesting and complement observations by Neil Cheshire in the Gulf of Papua, on the south side of PNG, where he saw three floats totalling 345 birds on 25 July 1997. He considers these birds to be overwintering (southern winter) rather than early arrivals (Cheshire 2010). On 1 Sep SGC noted c5,000 over 3 hr SW of Hokkaido at 41.6N, 139.8E, and 4,000 in 2 hr later the same morning. On 15 Sep SGC noted c4,000 over 2 hr in the Sea of Japan at 34.4N, 130.8E and 44 on 19 Sep at 25.2N, 125.4E. **Cape Verde Shearwater** *Calonectris edwardsii* SGC saw one with 10 Cory's on 26 Apr at 4.8N, 19.7W and when approaching Praia, 96 birds on 29 Apr at 14.8N, 23.5W. **Newell's Shearwater** *Puffinus newelli* On 17 Jan SGC saw 2 at 20.3S, 169.1E and another 3 miles off Tanna, Vanuatu at 19.7S, 169.5E. **Boyd's Shearwater** *Puffinus boydi* When approaching Praia, SGC noted 9 on 29 Apr at

14.8N, 23.5W. **Hutton's Shearwater** *Puffinus huttoni* SGC noted 500 on 6 Jan at 43.3S, 173.2E from Lyttleton. **Little Shearwater** *Puffinus assimilis* When leaving Gough Island in the evening of 9 Apr, SGC saw 100s at 40.2S 10.0W which he ascribed to the Subantarctic form *which can only be separated at close range by darker face and (usually) larger dark collar* (Olney & Scofield, 2007). That said, the position would support that species or form.

STORM-PETRELS *Hydrobatidae*

Southern Storm-petrels *Oceanitinae*

White-faced Storm-petrel *Pelagodroma marina* SGC noted 20 on 7 Jan at 41.3S, 174.5E in the Cook Strait. **New Zealand Storm-petrel** *Pealeornis maoriana* This species was considered extinct before its rediscovery in 2003. Radio telemetry was used to detect the presence of breeding birds on three island groups in the Hauraki Gulf, near Auckland (Rayner *et al.* 2015). **Black-bellied Storm-petrel** *Fregetta tropica* Sailing in high latitudes SC/TT recorded small numbers from 63.2S, 62.9W to 59.9S, 26.6W in Dec 14 to early Feb 15 with 54 singles on 30 Dec 14 at 60.6S, 57.4W. SGC noted 80–90 on 29 Mar at 61.1S, 52.6W and group of 30+ on 4 Apr at 52.0S, 37.0W. **White-bellied Storm-petrel** *Fregetta grallaria*. On 10 Apr SGC recorded 9 at 37.5S, 11.8W and next day 26 at 37.3N, 12.3W.

Northern Storm-petrels *Hydrobatinae*

European Storm-petrel *Hydrobates pelagicus* On 21 Apr SGC heading north from the Southern Ocean first encountered a group of 15 on the water at 9.8S, 12.6W. **Madeiran [Band-rumped] Storm-petrel.** *Oceanodroma castro* On 18 Apr SGC noted 3–400 during a late afternoon boat trip from Jamestown to Speery Island, and commented that many were seen at both Speery Island and Egg Island. **Swinhoe's Storm-Petrel** *Oceanodroma monorhis* 3 during one hour pelagic survey at 10.0N, 76.1E on 20 Sep (CNHS). **Fork-tailed Storm-petrel** *Hydrobates furcata* SGC notably recorded 1,000+ on 21 Aug at 55.1N, 166.5E.

TROPICBIRDS *Phaethontidae*

Red-billed Tropic-bird *Phaethon aethereus* SGC saw one on 16 Apr at 20.5S, 7.1W. **Red-tailed Tropicbird** *Phaethon rubricauda* SGC saw one on 13 Jan at 31.5S, 170.5E. A vagrant bird(s) has been reported from Inaccessible Island, 37.3S, 12.7W on 13–15 Feb (Bond *et al.* 2015). SGC first saw one on 15 Apr at 24S, 8.1W when en route to St Helena. **Yellow-billed Tropicbird** *Phaethon lepturus* SGC recorded 1 on 17 Jan at 20.3S, 169.1W and another on 18 Jan at 17.8S, 168.1E; northbound on 20 Apr the first sighting was at 13.6S, 8.3W.

FRIGATEBIRDS *Fregatidae*

Ascension Frigatebird *Fregata aquila* On 18 and 19 Apr SGC recorded an immature bird at Speery Island, a seabird stack close St Helena, the first he has seen in seven visits. **Lesser Frigatebird** *Fregata ariel* 1 photographed at 12.2N, 75.1E on 29 Mar (MNHS). SGC noted ca.200 on 15 Jun at 16.9S, 122.2E in the Lacepede Islands and on 15 Jul, 2 when anchored at Bigge Island (14.2S, 125.2E).

GANNETS and BOOBIES *Sulidae*

Northern Gannet *Morus bassanus* DKB recorded 45 Ad/hr at 53.8N, 5.2W on 16 Sep; 450 Ad/hr at 58.7N, 4.3W on 17 Sep; 8 Ad/hr at 63.0N, 7.6W on 25 Sep; 350 Ad/hr at 57.7N, 3.4W on 27 Sep; 39 Ad/hr at 54.1N, 5.1W on 28th in the Irish Sea. On a rather birdless Channel crossing SEC noted 10 Ad at 49.6N, 0.4W after leaving Dieppe on 8 Oct. **Brown Booby** *Sula leucogaster* SGC reported 21 with terns sitting on floating palm tree on 28 Jan at 9.2S, 144.0E. MC noted 3 throughout the day at 12.5N, 55.2E on 26 Apr. TJ recorded 6 at 20.2N, 120.3E on 11 Jun and 1 at 4.0N, 100.0E on 18 Jun. SGC noted 1,500+ on 15 Jun at 16.9S, 122.2E in the Lacepede Islands, and 2,000+ on 27 Jul in the same area. **Red-footed Booby** *Sula sula* TJ recorded 5 at 11.0S, 70.43E on 26 Jun and 3 at 13.9S, 66.3E on 27th. MC reported 6 soaring around the ship at 4.9S, 47.0E on 26 May.

SANDPIPERS, SNIPES *Scolopacidae*

Red (Grey) Phalarope *Phalaropus fulicarius* SGC saw 20 on 15 Aug at 64.2N, 172.7E and notably recorded 800+ on 21 Aug off Bering Island at 55.1N, 166.5E. **Red-necked Phalarope** *Phalaropus lobatus* SGC counted 6, *c.*40 and 10 on 5 Feb at 0.4N, 127.5E; and on 8 Feb 166 in small groups at 1.4N, 120.8E. SGC recorded 100+ on 26 Aug off Bering Island at 51.0N, 157.0E; 64 on 30 Aug in the Sea of Japan 44.3N, 141.1E; and on 15 Sep 9 were seen on the approach to Hagi, Honshu at 34.5N, 131.2E. DKB noted 1 at 66.9N, 13.6E on 24 Sep.

SKUAS and JAEGERS *Stercorariidae*

Pomarine Skua *Stercorarius pomarinus* SGC had a scattering of sightings in the tropical western Pacific with single birds at 20.0S, 169.3E on 17 Jan and at 11.0S, 163.1E on 21 Jan; and 2 on 1 Feb at 5.6S, 137.6E and 3 at 5.4S, 137.1E. On 16 Aug SGC recorded 12 at 63.9N, 177.5E, and 20+ including a dark phase bird at 64.6N, 176.1E. On 28 Aug SGC recorded 86 ad and imm at 47.9N, 144.4E. DKB recorded 1 at 58.6N, 5.2W off Cape Wrath on 27 Sep. **Long-tailed Skua** *Stercorarius longicaudus* 1 photographed at 12.2N, 75.1E on 29 Mar (MNHS). SGC had very close views of 1 on 24 Apr at 5.5S, 15,4W with another at 3.4S, 16.2W; 4 on 27 Apr at 7.0N, 21.9W and 4 more next day at 11.3N, 22.8W. Krishnamoorthy Muthirulan recorded an adult far inland at 10.8, 76.8E on 9 May. **Arctic Skua** *Stercorarius parasiticus* Mandar Bhagat photographed 1 at 15.4N, 73.7E on 27 Sep.

GULLS *Laridae*

Glaucous-winged Gull *Larus glaucescens* SGC notably recorded 1 Ad on 21 Aug at 55.1N, 166.5E just off Bering Island. **Iceland Gull** *Larus glaucoides* DKB noted 1 at 70.1N, 23.0E off Altafjord. **Glaucous Gull** *Larus hyperboreus* SGC saw 7 on 15 Aug at 64.2N, 172.7E. DKB noted 3 at 70.0N, 23.3E off Altafjord and 5 at 71.0N, 26.1E off North Cape on 22 Sep. **Slender-billed Gull** *Chroicocephalus genei* Recorded at 29.6N, 32.5E on 17 Apr (MC). **Brown-hooded Gull** *Chroicocephalus maculipennis* TT recorded 2 on 19 Feb 52S, 58.4W east of Choisel Sound. **Ross's Gull** *Rhodostethia rosea* Confirmation of a wintering ground: using satellite and geolocator telemetry, confirms a wintering ground of some birds from a colony in the Canadian Arctic winter in a restricted area of the northern Labrador Sea. (Maftei 2015). **Black-legged Kittiwake** *Rissa tridactyla* SGC saw 20+ on 19 Aug at 60.9N, 172.4E. DKB counted 30 Ad/hr at 58.7N, 2.6W off Duncansby Head on 27 Sep; 30 Ad/hr at 54.6N, 5.3W and at 54.0N, 5.1W on 28 Sep and elsewhere 2–5 Ad/hr on passage from 16–28 Sep.

TERNS *Sterninae*

Roseate Tern *Sterna dougallii* SGC recorded 21 at 16.7S, 122.2E in the Lacepede Islands. From eBird records: Mandar Bhagat photographed 10 at 15.4N, 73.7E on 27 Sep. On 4 Oct, 6 were recorded at 11.8N 75.3E (MNHS). **White-winged Black Tern** *Chlidonias leucopterus* SGC recorded 6 at 10.4S, 150.7E off Milne Bay, PNG.

ALCIDS *Alcidae*

Thick-billed Murre (Brünnich's Guillemot) *Uria lomvia* At daybreak on 15 Aug SGC recorded 34 at 64.3N, 170.9E and then 64 at 64.2N, 172.7E; then 4 on 17 Aug at 62.3N, 178.1E. On 26 Aug SGC recorded 5/hr at 51.3N, 157.6E. **Common Murre** *Uria aalge* DKB noted 130/hr, plus 110/hr auk sp. which were mainly this species at 55.6N, 6.4W off Scotland; 4/hr at 58.7N, 2.6W on 27 Sep; and 45/hr plus auk sp. 30/hr which probably almost all this species at 54.6N, 5.3W on 28 Sep. **Kittlitz's Murrelet** *Brachyramphus brevirostris* On 16 Aug SGC saw two groups of 5 birds in area of 64.6N, 176.1E, Chukotka and on 17 Aug one on the approach to Meynpil'gyno (village), Chukotka, 62.5N, 177.3E. **Ancient Murrelet** *Synthliboramphus antiquus* In the Sea of Okhotsk on 28 Aug SGC saw 2 at 47.9N, 144.4E. **Parakeet Auklet** *Aethia psittacula* On 26 Aug SGC saw 1 at 51.1N, 157.2E; on 15 Aug 13 at 64.2N, 172.7E. **Crested Auklet** *Aethia cristatella* In the Bering Sea on 15 Aug SGC estimated 20,000+ at 64.2N, 172.7E with just 5 next day at 31 63.9N, 177.5E; and 6 in the Sea of Okhotsk on 28 Aug at 47.9N, 144.4E. In southern Kamchatka on 26 Aug SGC recorded c4,400 in a 2hr watch at 51.2N, 157.6E. **Least Auklet** *Aethia pusilla* At daybreak on 15 Aug SGC recorded 12 at 64.3N, 170.9E and then 31 at 64.2N, 172.7E. **Whiskered Auklet** *Aethia pygmaea* On 28 Aug SGC recorded 5 at 48.4N, 145.0E. **Rhinoceros Auklet** *Cerorhinca monocerata* On 29 Aug SGC saw 1 on the approach to Korsakov, southern Sakhalin Island, 46.6N, 142.8E. **Horned Puffin** *Fratercula corniculata* On 15 Aug SGC recorded 8 at 64.3N, 170.9E and 31 on 17 Aug at 31 62.3N, 178.1E. **Tufted Puffin** *Fratercula cirrhata* On 15 Aug SGC recorded 9 at 64.3N, 170.9E and 26 on 19 Aug at 31 62.3N, 178.1E. On 21 Aug SGC recorded 10/hr at 55.9N, 166.6E; on 22 Aug SGC recorded 20–40/hr at 55.1N, 165.6E; and on 26 Aug 80/hr at 51.3N, 157.6E.

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Plate 108. Swallow-tailed Gull, Galapagos Islands, April 2016. © *J Barton.*

RNBWS Database: where now and where do we go?

by Captain Stephen Chapman, MN

The Society currently has an on-line database that contains all the seabird and landbird records that have been published in *Sea Swallow* since 1947. Some of the early data is general and sometimes named at family level rather than at species level. As the level of expertise of observers increased and more detailed identification field guides became available, so the quality and value of the data improves. This data has been entered over the years by various members and inevitably with large volumes of data, without inbuilt checks and rules, there will be keying errors. For example, records from the southern hemisphere demand that the latitude is entered with a minus sign so 65° 12'S is entered numerically as -65.2 and while 65° 12'N is entered numerically as 65.2. Get it wrong and your sighting of a penguin or a Kittiwake ends up in in the wrong hemisphere. The same is true for longitude: east longitude is positive and west longitude is negative. Errors here are less easy to spot, unless the ship's course is plotted. Even if the data is transposed exactly from the printed volume one comes across clerical errors there too, and these become are apparent when cross checking the database against the paper copy. In a sophisticated data entry system, a northern hemisphere penguin entry would immediately throw up a query to the user asking if that is really what is meant.

I have used the BTO Garden Bird Watch on-line weekly recording system for many years. From my country garden data, I can show the coming and going of migrants, the impact of removing peanut feeders, the arrival of pheasants seeking sanctuary from the shooters, etc. Where the BTO database scores is, if I try to enter say 30 Blackcaps instead of the commonly seen one or two a query is instantly flagged. We don't have such input checks at present. We even accept incorrectly spelt names, while other databases don't. Unless names are unique a search can miss those with spelling errors. Implementing checks and balances is the key role the database manager.

Over the recent past I have been going through the records held in the database correcting these sorts of errors. I am impressed by the general precision and the huge amount of work undertaken by Stan Howe, Mark Cutts, Steve Copsey and others in capturing the data in the first place. It really was a great effort and we are grateful for that. Looking to the future the only way that we can capture large volumes of data with precision is by the observer inputting data using a worksheet, like MicroSoft Excel. For seabirds the ten essential data fields required are noted in Table 1 below. A worksheet enables the observer to cut and paste and replicate the data in columns. It is less tedious than it sounds. The validation check comes

Table 1. Essential data fields required.

	Field name	Format	Guidance	Example
1	Observer's ref	numeric	Optional	1
2	Common name	Text	As per RNBWS 2013 list	Northern Fulmar
3	Latin name	Text	As per RNBWS 2013 list	Fulmarus glacialis
4	Observer name	Text	Surname first	Chapman (SEC)
5	Date	dd/mm/yyyy	Numeric only as specified	13/09/2016
6	Ship name	Text		MV Normandie
7	Latitude	Degrees & decimal	South latitude -ve	50.3
8	Longitude	Degrees & decimal	West longitude -ve	-0.7
9	Number	Alpha numeric	*c.* and + accepted	2
10	Notes	Text	Notes on ID, behaviour, plumage, associations with cetaceans etc all add value	Total in 2hr watch on port side

with a third party scanning the data for consistency, anomalies and out of range data. The option then exists for queries to be raised with the observer before uploading.

There are two main areas of work that will be ongoing for some time. First, to capture the records in *Sea Swallow* not yet on line. Second, to capture selectively data submitted but not included in *Sea Swallow* simply from lack of space. That is a huge task, but it can be executed in parallel and brought together for validation and uploading.

A step in this direction has already been made. The recording form now available on the web site is a simple Excel sheet with full instructions for data entry. Once complete and submitted it will be validated by the database manager and promptly uploaded. Today, the database of worldwide records stands at around 36,000. In bird recording terms this is very small. Other recording schemes count their record in millions, if not tens of millions. The article by Dipu Karuthedathu and Praveen J (see page 18), captures well the distribution of Flesh-footed Shearwater *Ardenna carneipes* off the coast of southwest India from observations hosted on eBird. That said, there is still valuable information to be gained from our database. RNBWS data shows records of this shearwater further offshore and further south meshing with the peak occurences reported in May, August and September.

Marine biologist Abhishek Jamalabad, working in the northern Arabian Sea, recorded a group sighting of *Sula dactylatra.* This can be placed in context of sightings of members' reports over 30 years as shown in the graphic on page 82. On a larger scale, we were asked for sightings of certain species of albatrosses by Bird Life International to back up research on distribution and measures to best protect the species.

For the time being, the best way we have to address such questions is the off-line ability to download the database from the hosting site and conduct the analysis in Excel using search, sort, filter and pivot tables to drill down into the data. Using such a technique I can now say that we have records from the year 1923, from 1,160 unique observers, on over 800 ships or shore units with sightings stretching from 80.61°N to 76.6°S. So who was reporting from such high latitudes to the north and the south? It was in fact Beau W Rowlands on board the Russian MV *Klavdiya Yelanskaya* on 23 July 1993 who commented: *No birds reported, but five Polar Bears at Cape Nansen (Smith Bay), George Land.*[1] Then LA (Metoc) Chris Patrick on board HMS *Endurance* recorded amongst other birds, an Emperor Penguin *Aptenodytes forsteri* on 25 January 1994, in Antarctica.[2]

On a couple of technical points, in future we could develop an app to allow casual data collection. That approach has attendant issues that you don't always know who the observers are, and the quality of their identification skills; but it could be a way to engage with a new breed of observers and is one we should work through. It has the advantage that data capture can be mainly automated such that position (from GPS feed) and bird name would come from a drop down list (either common, or Latin) and date/time would be generated by the system, leaving the observer to input number and notes. The finely crafted record sheets such those that tanker master Captain Peter Chilman submitted in 1978, see *Sea Swallow* 30: 5, would no longer be seen and I suspect that the role of note book and pencil in recording will be with us for a some time to come. Passing through areas of concentrations of large numbers of species an app however well designed is unlikely to suffice. Maybe I'm a traditionalist, but we are a step along the way in adopting digital worksheets for large volumes of data.

In conclusion, I would emphasize that photographic records are of immense value when it comes to field identification of out of range species like *Puffinus yelkouan, P. mauretanicus* and other small shearwaters, and similar species that are commonly seen in the same sea area, for example *Pterodroma feae* and *P. madeira*. Please continue to submit to me, or post on the Society's Flickr site.

We are keen to hear views from members and engage in debate on the course and speed of how we move more into the digital era. And we would also like to hear from those who wish to explore the data, to a depth that the web site currently doesn't provide. The data is yours to be used and explored.

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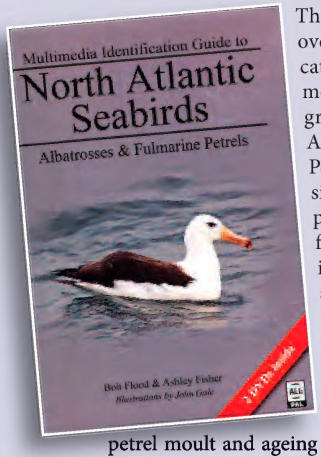
[1] *Sea Swallow* 43: 46; [2] *Sea Swallow* 45: 34

Book Review

Multimedia Identification Guide to North Atlantic Seabirds: Albatrosses and Fulmarine Petrels by Bob Flood and Ashley Fisher, illustrations by John Gale. Published by Pelagic Birds & Birding Multimedia Identification Guides in association with Scilly Pelagics. Hardback 278 pp plus 2 DVDs. Post free UK £39.99, Europe £44.99, Rest of World £49.99.

This is the third in a series of very successful multimedia identification guides to North Atlantic *procellariiformes* by Bob Flood and Ashley Fisher. The guide consists of a 278 pp hardback book plus two integrated DVDs. Species covered are Atlantic and Indian Yellow-nosed Albatross, Shy Albatross, Grey-headed Albatross, Black-browed Albatross, Tristan Albatross, Southern and Northern Giant Petrel, Atlantic and Pacific Fulmar and Cape Petrel. The eleven featured species are breeders, vagrants and potential vagrant confusion species.


Multimedia Identification Guide to
North Atlantic Seabirds
Albatrosses & Fulmarine Petrels
Bob Flood & Ashley Fisher
Illustrations by John Gale

The book gives an overview of identification, ageing and moult of the three groups considered, Albatrosses, Giant Petrels and medium sized Fulmarine petrels. This is followed by detailed individual species accounts and distribution maps. I found particularly valuable the clear account of albatross/giant petrel moult and ageing based on the works of several researchers and the authors' own studies. Moult and colour morphs of Atlantic and Pacific Fulmars are discussed in detail. Comparison ID of "confusion pairs" is thoroughly covered. The final section provides a bullet point summary of essential ID features. Appendices include the vagrancy potential for Pacific Fulmar and aberrant plumaged Atlantic Fulmar.

All species are amply illustrated with over 220 high quality colour images by various photographers showing age progression and moult. Most enjoyable and a major highlight of the book is the artwork of John Gale comprising 180 superb, accurate illustrations of all species' plumages, in flight and at rest on the water.

The two DVDs have a total duration of over 120 minutes, contain over 300 video clips, 120 illustrations and feature all species dealt with by the guide. The authors appropriately recommend viewing at first the "Group Introduction" on DVD 2. Each video clip except the "ID Challenge" is numbered and annotated with species, location and date. A useful timeline is given in the book for each DVD repeating this information, plus ID answers. The video clips are of good quality and are fit for purpose; most were taken by Bob Flood, a remarkable achievement particularly when heavy weather conditions prevailed. His narration is clear, informative and demonstrates his command of the subject.

The authors' enthusiasm and dedication to their subject are manifest in this very detailed book. There is a degree of repetition and the editing could have been more stringent, but this is acceptable in the context of ID proficiency. The book is mostly good red meat with very little skilly. Combined with the DVD set the book is good value and will be enjoyed by seabird enthusiasts around the world.

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Plate 109. Peter Carr holding a Madeira Zino's Petrel, September 2015. © *F Zino*